

GOLD AND SILVER COINS.

JUNE 30, 1832.

The Select Committee on Coins, to whom was referred the state of the Coins, made the following

REPORT:

MR. CAMPBELL P. WHITE, from the Select Committee on Coins, who were instructed to inquire into the expediency of authorizing prompt payment in coin for bullion delivered at the Mint, requiring a seignorage not exceeding the expense of coining, making gold a tender in large, and silver a legal tender in small payments, or the reverse; and to report whether any and what evils or inconveniences result from the currency of bank notes of small denominations, and what are the appropriate remedies; whether it is practicable and expedient to restrain their circulation, by providing that the bills of such banks as issue them shall not be received in payments to, or deposits on, account of the United States, or by any other and what means within the legitimate powers of Congress; and what further measures are requisite for the purpose of preserving an adequate supply of gold and silver coins in use, and increasing the specie circulation of the country; and, also, to inquire into the expediency of making silver the only legal tender, and of coining and issuing gold coins of a fixed weight and fineness, which shall be received in payment of all debts to the United States, at such rates as may be fixed from time to time, but shall not be otherwise a legal tender, respectfully report:

That your committee, having been previously directed to present their views with respect to small coins, and to the regulations of the Mint, embrace the present occasion to discharge that duty.

These important inquiries involve a comprehensive investigation of the science of money.

Your committee recently submitted a report on gold and silver coins, the result of a diligent and laborious examination of this interesting subject, which they ask permission to refer to, for the exposition of their sentiments as to general principles and practical effects, which have an important bearing on the matters now under consideration; but, inasmuch as wise regulations in regard to money are highly advantageous, and, when once established, preclude the necessity of subsequent legislation, your committee will hazard the charge of prolixity or of repetition, rather than limit their efforts in propounding and establishing correct opinions upon this difficult and controverted question.

Much misapprehension prevails as to the nature and functions of money: a great deal of money will procure a large supply of other commodities;

but this money must have been previously procured from the mines by the expenditure of merchandise of nearly equal value; the real value of gold and silver is regulated, like that of all other articles, by the quantity of labor and capital necessary to bring them to market; and they can only be obtained by the transfer of equivalents.

The abundance of money in a particular country, or in the hands of individuals, is merely an evidence of wealth, the consequence of the ability to purchase it, but it is not the cause of that ability; but money, being the measure by which all possessions are rated or valued, and the merchandise for which all other articles are freely obtained in exchange, it is not unusual to consider money and riches as identical.

Wealth consists in an abundance of necessities, conveniences, and luxuries, to be consumed for sustenance or gratification, or to be used with a view to reproduction: the quantity of these products is the just measure of wealth, and not their estimate in money. Money is a convenient mean wherewith to measure and rate their relative value, and to effect their transfer; but the receiver of money does not wish to consume or keep it; he uses it merely as an instrument which saves labor in effecting barter; he parts with it for other commodities, which will support or gratify him, or reproduce articles which may increase his capital or possessions; but money in his chest or bank is unproductive stock, which he hastens to dispose of.

The laborer nominally works for money; but the customary maintenance is the recompense which he requires and actually receives.

Money is to him an order for goods, the medium by which he supplies his wants. It is thus used by all classes, by the wealthiest as well as by the poorest members of society.

Barter being inconvenient, the planter sells his cotton or tobacco for money; the farmer, his wheat or corn; the manufacturer, the produce of his workshop; the merchant, his agency, and the use of his capital; and those of learned professions, their time and abilities: but it will be found, upon investigation, that the result of all transactions is the exchange of labor, services, commodities, or possessions.

Money is a very useful and ingenious machine wherewith to distribute for consumption the products of industry; but only to the extent of the time or labor saved by its use, can it be alleged to contribute, in any degree, to the increase of wealth.

Lands, minerals, &c. are the constituent parts or first principles of wealth; and the annual income or riches of this and of every other country depends upon the number of inhabitants, their ingenuity, industry, and amount of capital. Capital is reserved labor, its accumulated savings which have been expended on useful improvements, machinery, food, clothing, raw produce, and other commodities. Labor being, therefore, the efficient cause of production, it is evident that national riches can only be increased by greater industry, or by a more advantageous application of the labor used.

Chemical science and mechanical ingenuity may, and, doubtless, will, as they have already done, render labor more effective or productive, and thereby increase the aggregate quantity of wealth, enabling a portion of the existing labor and capital to be appropriated to other pursuits, adding to the quantity or variety of necessities or luxuries, and distributing to every proprietor and worker increased means of enjoyment, to be consumed for immediate gratification, or reserved as capital.

The ingenuity of Watt, of Fulton, or of Arkwright, has contributed infinitely more to the comfort, satisfaction, and real wealth of mankind, by in-

creasing the productive powers of labor, than all the precious metals which the fertile mines of the new world have furnished, united to all the benefits, if such there are, which have resulted from Government regulations in regard to money since the commencement of time.

Doctor Adam Smith, has very correctly defined money to be "the universal instrument of commerce, by the intervention of which goods of all kinds are bought and sold, or exchanged for one another." Count De Verri alleges "that money is a commodity or metal, whose value is represented by the commodity with which it is exchanged; it is the universal merchandise, that is the merchandise, which, on account of the smallness of its volume, which renders its transport easy, and on account of its divisibility and incorruptibility, is universally accepted, and taken in exchange for any other merchandise." Mr. Locke was of opinion that "money is the measure of commerce, and of the rate of every thing; it is the thing bargained for, as well as the measure of the bargain, being equivalent to the thing sold; it is not only the measure of the value of the commodity it is applied to, but it is given in exchange for it as of equal value." Lord Lauderdale appositely calls money "a labor saving machine," facilitating barter, which is inconvenient, tedious, and consequently expensive.

According to the profound and sagacious Mr. Hume, money is "nothing but the representative of labor and commodities, and serves only as a method of rating or estimating them. It is not, properly speaking, one of the subjects of commerce, but only the instrument which men have agreed upon to facilitate the exchange of one commodity for another; it is not one of the wheels of trade: it is the oil which renders the motion of the wheels more smooth and easy."

The minute division of labor, and the infinite variety and amount of its productions, preclude barter, and render a medium of exchange indispensable; it is therefore of high importance that this essential instrument of commerce should be as invariable as may be, so that all articles may be accurately estimated by a known and common measure, and that bargains may be fulfilled with integrity, according to the stipulated or implied meaning of the contract.

All experience testifies, that gold or silver money is the least variable measure that commercial sagacity has yet discovered; their scarcity, durability, and divisibility, are peculiar properties, qualifying them eminently for this service, and the history of commerce does not record a single instance of their inadequacy.

The real value of the precious metals is ascertained, like that of all other commodities, by the expense of production, but most articles being produced for speedy consumption, any considerable variation from the extent of effective demand, will occasion a considerable fluctuation in market price.

It is not so with gold and silver brought to market as money, they are not intended for consumption, but for permanent use, to be added to the existing stock of money; and this peculiarity contributes essentially to maintain great uniformity in its value; if the annual produce of gold and silver, amounts to twenty, or twenty-five millions of dollars, and that one half is consumed in plate, jewelry, and other objects of manufacture, it is evident that the residue, whatever may be the extent of occasional fluctuations in its cost at the mines, can have no sensible influence on the value of an accumulated stock, estimated, by respectable authorities, at from five thousand millions to seven thousand millions of dollars: experience corroborates the correctness of this

view, for it is alleged, by the most esteemed and sagacious observers, that there has not been any appreciable alteration in the relative value of money for nearly two hundred years. The natural tendency of commerce is to preserve in every country the like uniformity of value, by distributing the precious metals in quantities proportioned to the relative amount of exchangeable products; money being an unprofitable commodity, no merchant will import it so long as any other merchandise can be brought in without loss; if a favorable balance of trade compels its introduction the redundancy thence arising will have occasioned a proportional scarcity elsewhere, causing a rise of prices in one country, and a depression in the other, increasing imports, or diminishing exports, until a just distribution or equilibrium is restored; and experience has established, that the result of commercial operations is so effective, that the value of a gold or silver currency will rarely vibrate beyond the expenses of transportation.

The peculiarities in a circulating medium of coin, or of paper, are strikingly dissimilar. Gold or silver being costly articles, which can only be procured by the transfer of an equal value of the products of industry, national interest, the most effective check imaginable, is constantly operating to prevent any unnecessary increase in their quantity; on the other hand, the cost of bank notes is trivial, and their emission yielding a large profit to the privileged issuers, the prospect of gain powerfully encourages the most active efforts for their increase; a sudden increase of gold or silver is speedily and profitably corrected by the purchase of foreign goods, made cheap by a correspondent scarcity of money; an important increase in paper currency can only be corrected by one of those painful vicissitudes in commerce which we periodically experience.

The aggregate amount of money in general commerce, or of currency, in a particular state, has an important effect upon market price, but none whatever upon real value or riches; a day's labor, a bushel of wheat, ten pounds of cotton, of coffee, or of sugar, would be equally beneficial or gratifying to consume, to use for reproduction, to exchange for other commodities, or to save as capital, whether they were respectively rated, or valued in money at ten cents, at one dollar, or at ten dollars each. Money or market price is the mode of rating, or of comparing values but the measure of wealth is to be ascertained and estimated by the variety or quantity of necessities or luxuries which every individual can obtain in exchange for his crop or manufacture, or labor, or services; a general and permanent increase or decrease of money has a proportionate effect upon prices, but none upon exchangeable value: this is regulated by the quantity of labor, which includes capital expended on production; an increase in the produce of labor is a real increase of wealth, but it does not add to exchangeable or money value. This position will be illustrated by reference to our principal product, cotton; its exchangeable or money value bears no proportion to the actual increase of its quantity: its export in 1830, compared with 1806, is eight and one-half times greater in quantity, and but three and a half times in money price; so far as this increase is attributable to an increased expenditure of labor and of capital in producing the quantity exported, to that extent has its exchangeable, and money value increased; so far as the increase of produce has arisen from the superior fertility of new lands, there has been an increase of riches, but no increase of money value, every pound of cotton being as valuable now for clothing or other useful purposes as in 1806; the relative increase in the produce of the labor employed in raising it, adds to the real wealth or in-

come of every consumer by enabling him to use more of finer cotton clothes, or to procure the usual supply, in exchange for a less portion of his labor, and thus affords him increased means to obtain a greater variety, or greater quantity of other gratifications.

An increase in the currency is an increase of bills of credit, which adds to the number of transfers, and of new undertakings, by affording the means of effecting purchases and payments; but the transfer of articles already possessed does not add to their real value; and the labor and capital employed in these pursuits, must, in the nature of things, have been withdrawn from some other occupation yielding the ordinary recompense; for, labor and capital being the effective means of production, of subsistence, and of income, can never be unoccupied in a rising country. The increase in the produce of industry, which is the true measure of wealth, is slow, under the most favorable circumstances, as men are not suddenly created, nor can the machinery and commodities which constitute capital be rapidly multiplied and accumulated. The transfer of labor and capital will have been advantageous, if the produce be increased; but the probability or reality of beneficial results from the feverish efforts of commercial excitement, may be fairly questioned. An actual increase of products is a positive increase of riches, which adds to the quantities of comforts, of gratification, and of capital, and presents appearances and consequences the very reverse of the painful aspect uniformly attendant upon these delusive periods of inconsiderate overtrading.

In the opinion of your committee, no circumstances can arise which could usefully or legitimately require a sudden and important increase of currency; a great addition to the productive power of industry, will add, in the like ratio, to the quantity of necessaries and luxuries, to the real wealth of society, but it does not necessarily create any addition to money value.

Upon mature deliberation, the committee cannot doubt the correctness of the following general principles in regard to money, corroborated by the history of commercial nations, and recorded in their former report.

1st. "That gold or silver is the only sound, invariable, and perfect currency that human wisdom has yet devised."

2d. "That every nation will possess its equitable and useful portion of the gold and silver used as money, if they do not repulse it from domestic circulation, by substituting a different medium of exchange."

3d. "That *one metal* may be selected, with a certain assurance of finding *in the metal chosen*, such proportion of the entire amount of the money of commerce, as their exchangeable commodities bear to the total amount of merchandise produced."

4th. "If both metals are preferred, the like relative proportion of the aggregate amount of metallic currency will be possessed, subject to *frequent changes from gold to silver, and vice versa*, according to the variations in the relative value of these metals."

The committee think that the *desideratum in the monetary system is a standard of uniform value*; they cannot ascertain that both metals have ever circulated simultaneously, concurrently, and indiscriminately, in any country where there are banks or money dealers; and they entertain the conviction that the nearest approach to an invariable standard, is its establishment *in one metal*, which metal shall compose exclusively the currency for large payments.

Impressed with the accuracy and practicability of the principles and views detailed, the committee do not conceive it to be of much importance, ab-

stractly considered, whether "gold be a tender in large, and silver a legal tender in small payments, or the reverse." The money of England, for large transactions, is gold; that of France is in practice silver; and the prosperity of these nations, under different systems, exemplifies, that skill, industry, and capital, are the active and efficient causes of producing wealth.

If the currency of the United States is to continue to be composed exclusively of bank notes, the committee would recommend the regulation of gold at such increased value as would convert the specie fund into that metal. Gold being the money of England, where our foreign trade and exchanges chiefly centre, an adverse balance of payments would be more quickly perceived and liquidated, and the currency would maintain greater uniformity of value; a real par of exchange would obtain, the variations from which would promptly indicate the course of trade, and suggest the necessary corrective.

The committee cannot perceive that any benefit could arise from "coining and issuing gold coins of a fixed weight and fineness, which shall be received in payment of all debts to the United States at such rates as may be fixed from time to time."

A varying scale of value in coin must have a prejudicial effect on contracts, issuing to the gain of the importing merchant, the owner of gold, or the Treasury, according to the nature of the regulations or of events.

If it be contemplated to coin gold for this object upon Government account, at a high relative rate, the bond payer, or debtor for lands, will scarcely apply for a medium of payment by the use of which he will be no gainer, if it be coined without charge at an enhanced value, the Treasury will lose whatever the depositor at the Mint may gain, as the disbursements of the Government, howsoever received, must be paid, like other debts, according to the established standard. Import duties form an important and component part of the current value of the great mass of the foreign commodities; this value should be in accordance with the practical currency, and uninfluenced by any uncertain or fluctuating measure; besides, the aggregate amount of the public revenue has heretofore been justly considered as an instrument which might be usefully and effectually exercised for the beneficial object of maintaining uniformity of value in the circulating medium.

Silver is the ancient currency of the United States, the metal in which the money unit is exhibited, the money generally used in foreign commerce, and that description of the precious metals, in the distribution of which we exercise an extensive agency. The committee, upon due consideration of all attendant circumstances, are of opinion that the standard of value ought to be legally and exclusively, as it is practically, regulated in silver.

Upon proceeding to inquire into the "evils and inconveniences of bank notes of small denominations, and the appropriate remedies," your committee beg leave to remark; that, in the report already adverted to, they endeavored, by a detail of the ordinary course of banking business, to show the impracticability of maintaining any coins in circulation, if the emission of notes of the like denomination be permitted; that the cheapest currency, if it enjoy confidence, will eject all others from circulation; and that the issue of notes of one dollar and upwards establishes an unrestricted paper system, until its nominal convertibility becomes operative, by an adverse balance of payments occasioning a free export of specie.

The committee confirmed the total inefficiency, in ordinary times, of the convertibility of notes as a restraint upon issues, by referring to authentic state-

ments of the relative circulation of the most important banks, which exhibited an excessive and injurious increase of their notes within the last two years—an increase which has materially degraded the value of the currency—which could not have been effected if any practical restriction steadily prevailed; which exposes the integrity of contracts to be impaired by the variable and interested operations of banks; and which chiefly occasions the property and industry of the United States to be frequently subjected to injurious vicissitudes and re-actions in trade, to “those jerks and changes” (as they are emphatically characterized by Mr. Baring, an eminent banker,) “so fatal to credit and to commerce.”

Bank notes of small denomination are equally convenient and effective in small payments as the larger denominations in more extensive transactions. They are highly objectionable in two respects.

1st. In subjecting the industrious and uninformed classes to the risk of loss from the impracticability of knowing the genuineness of the paper, or the solvency of the issuers.

2d. Their use renders the currency exclusively paper, and removes the only steady and effective limitation upon excessive issues.

It is in this latter indirect or incidental effect, that serious “evils or inconveniences result from the currency of bank notes of small denominations.” It may reasonably be asserted, that one-half of the currency used, is composed of notes under twenty dollars, including small change. According to this data, the entire amount of bank notes of the denomination of twenty dollars and upwards, must, in 1830, have been about thirty millions of dollars; suppose, for illustration, the other half of the currency had been gold and silver, as is the case in England, or that Congress, at that period, had interdicted effectually any farther increase of small notes, could the banks, under such regulations, have increased their issues, as is estimated, fifty per cent.? would not a general rise of prices, to that extent, have compelled the banks to issue into circulation, not only fifteen millions of notes of twenty dollars and upwards, but fifteen millions of coin, also, to fill up the minor channels where the farther issue of small notes was prohibited? The banks could not have met such a drain upon their vaults, in addition to the foreign demand for specie; or, rather such excessive issues, and depreciation of the currency, with its evil effects upon commerce and industry, never would be experienced if the emission of small notes was interdicted.

The committee cannot doubt the power or the duty of Congress to remedy all defects in the currency. The constitution of the United States expressly states that “the Congress shall have power to coin money, regulate the value thereof, and of foreign coin,” and “to make all laws which shall be necessary and proper for carrying into execution the foregoing powers, vested by this constitution in the Government of the United States;” and it recites that “no State shall coin money, emit bills of credit, or make any thing but gold and silver coin a tender in payment of debts.”

It appears to your committee that the obvious intent and meaning of these special grants and restrictions, was to secure, permanently, to the people of the United States a gold or silver currency, and to delegate to Congress every necessary authority to accomplish or perpetuate that beneficial intention. The committee are not disposed to question the efficacy or constitutionality of the measure suggested by a highly respectable authority, Mr. Gallatin, as remediate, that “Congress may, if it deems proper, lay a stamp duty on small notes, which will put an end to their circulation.”

The evils complained of—excessive issues of paper, and the consequent disappearance of gold and silver coins—are the growth of forty years. The committee, in their previous report, attempted to trace its progress; and it merits notice, that the acts of Congress of 1791 and of 1816 have contributed, in some degree, to produce, sanction, or prolong the general use of a paper currency.

Under these circumstances, the committee cannot recommend a prompt exercise of rigorous measures, though “within the legitimate powers of Congress,” until mild and patient efforts shall have failed of success.

The committee approve of the suggestion in the resolution under consideration, “that the bills of such banks as issue small notes shall not be received in payments to, or deposits on account of the United States;” but if the vast importance of the Treasury deposits to the Bank of the United States, would induce that institution to apply the like regulation to all other receipts into its various departments, the measure and its beneficial consequences, would be more comprehensive and effectual.

The discussion of the renewal of the charter of the Bank of the United States will enable Congress to act with important effect upon the currency. The right may be reserved as in other States, to modify its privileges as regards the denomination or amount of its issues according to the future pleasure of Congress. If the emission of notes or drafts of the Bank of the United States was prohibited, it would open an extensive field for the use of national coin, in objects of distant disbursement, for which the notes of State banks would not freely or satisfactorily circulate. Such a limitation would present a strong appeal to the State Legislatures for a proportionate and timely restraint upon their institutions, rather than wait the rigorous measures which the General Government will probably adopt in a matter of such magnitude to the public interest.

The committee are induced to believe that the prohibition of all notes under twenty dollars, would cause one half of the currency to be metallic; and as the increase of such a mixed circulation to an extent which would influence prices unfavorably, or disturb the equitable discharge of contracts, would invariably require the banks to furnish an addition to the amount of coin, equal to the increase in the quantity of notes, it is conceived that excessive issues, or important variations in the value of the currency, would no longer be experienced.

The only measure necessary for “increasing the specie circulation of the country,” is to make room for its circulation. All experience in this matter is in accordance with that of France in 1795, and of England since the return of peace. The destruction of the assignat currency occasioned every channel of circulation in France to be filled immediately with its appropriate supply of gold and silver coin; the resumption of specie payments in 1821, and the banks being restrained in April, 1829, from emitting notes under five pounds sterling, had the like salutary effect in England, establishing, to the conviction of all unprejudiced minds, that the operations of commerce will distribute to every nation its useful supply of the precious metals, if unobstructed by local regulations.

Although free trade will certainly produce an equitable distribution of the aggregate amount of the money of commerce, yet, inasmuch as the portableness of gold, presenting great value in small bulk, qualifies it eminently for the principal measure of exchange in a particular country, whilst silver, from opposite properties, possesses peculiar recommendations for coin of

small value, public convenience, therefore, requires the use of both metals—gold, where there is no paper for large transactions, and silver to facilitate retail trade, the distribution of articles for daily consumption, in portions sufficiently minute to meet the wants of every applicant; it is also necessary, for the protection and convenience of the public, that coins so indispensable should be permanently supplied.

The committee will proceed to “report what farther measures are requisite for the purpose of preserving an adequate supply of gold and silver coins in use;” and in this inquiry, the subjects of seignorage and of small coins may be appropriately discussed.

If the emission of notes under twenty dollars was interdicted, the minor channels of circulation would be immediately filled with coin; but whether that coin would be composed of gold and silver in the most convenient proportion for the public use, would depend altogether upon the regulation of the standard. The existing law, which undervalues gold, virtually precludes the use of that metal—if its value was raised beyond the market rate, it would cause silver to disappear—if their relative values were adjusted with the utmost precision, unavoidable vibrations would speedily disturb the accuracy of the adjustment; and experience teaches that the difference of a minute fraction of one per cent. will cause either metal to be withdrawn from circulation; a provident government must guard against these alternations, as the public convenience and satisfaction require the steady use of the customary coin.

Although the committee have recommended the standard of value to be regulated in silver alone, they are not insensible of the utility of using gold coins also; but their convenience cannot be obtained, without hazarding the loss of silver as the chief measure of value, unless gold be subjected to a seignorage, and restricted to small payments. This course is analogous to the money system of England, and the only means yet practiced, by which coins of both metals can be freely procured and permanently maintained in general circulation.

The charge for coinage, called seignorage, has been of various extent: as an abstract proposition it may be considered as equitable as any other tax; when it is levied, as in France, with the view of defraying the expenses of the mint, it appears to be strictly just, and entirely unobjectionable; these expenses are contracted for the public convenience; and the security and facility given to small transactions from the use of national coin, is an ample compensation, the charges on coinage must be borne by the nation, and whether they are paid out of the revenue, as in England, or at the mint, as in France, the result is not materially different. The French system estimates gold bullion at about three-tenths of one per cent., and silver at one and one half per cent. under its weight in standard coin, and as this regulation probably restricts mint operations within a useful limit, it seems preferable to free coinage, the expenses actually incurred at the mint compose a portion of the real cost of coin; and there does not appear to be any substantial reason for abating it, or for transferring the charges incurred at the mint to the general revenue. In point of fact, however, there is no important difference between the French and English system, by the former, coin can be obtained for gold bullion, deducting three-tenths of one per cent.; while the delay in coinage at the London mint, is valued at from one-sixth to one-half of one per cent., according to the demand for bullion. The committee will recommend the adoption of mint regulations, directing the melting

and assaying of domestic gold at a trifling expense; but that coinage be hereafter effected by prompt payment for gold bullion, at a discount of one half of one per cent., and for silver at one per cent.

A seignorage on coin, as a branch of productive revenue, when levied by the countries which furnish the chief supply of gold and silver, will affect, in no unfavorable manner, the interest of other countries, from the peculiar characteristics of money and of mining. Spain and Portugal exacted, for a long period, one-fifth (quinto) of the gold and silver produced in their colonies: and, to the latest period of possession, Spain levied a tax of ten per cent., aggravated by mint charges to twelve and a half per cent: on silver, these charges added to the real cost of production, and thereby prevented the working of such poor mines as would have defrayed expenses, if there had been no tax; but gold and silver money being merely an instrument of commerce—equally effective, whatever may be its quantity—its value increasing or decreasing in a ratio the reverse of the supply, the limitation of quantity produced by the colonial tax inflicted no injury on the countries which purchased and used these metals; nor will a seignorage imposed by the Government, on the issue of coins exclusively from its own mint, affect the nominal value of the currency, if it were practicable to restrain the issue to the precise number of coins which would circulate if there was no tax. Mr Ricardo has correctly remarked, that, “while the State alone coins, there can be no limit to this charge of coinage; for, by limiting the quantity of coin, it can be raised to any conceivable value.”

In 1819, the silver coins of England, which had been excessively debased by wear, were withdrawn, and a new coinage, on the principle recommended by Lord Liverpool, was issued. These coins, which are fabricated on Government account, are subjected to a seignorage varying with the market value of silver of from six to ten per cent.; that is to say, a pound of standard silver is coined into sixty-six shillings in place of sixty-two shillings, as was the ancient custom; and these degraded coins are limited to effect payments under forty shillings. Thirteen years have since elapsed, and the currency, which is the principal measure of value, having, in the interim, been a subject of frequent and warm discussion in that country, the committee conclude that no inconvenience or injury has been sustained by an excessive issue of the depreciated silver coinage, or it would not have escaped animadversion.

This system is, however, highly disapproved of by authorities, for whose opinions the committee entertain great respect. The late Secretary of the Treasury, in his valuable report on the relative value of gold and silver, observes, “that the whole productive wealth of a nation is the aggregate of accumulations from small transactions; and the character of the English monetary system, which has one standard measure for small, and another for large ones, may be practically understood, when it is observed, that, a tenant who receives, in payment for his products, silver tokens at 66s. for the pound, equal to 71s. 4½d. the pound for fine silver, may be obliged to pay his rent and taxes in a medium wherein the pound of fine silver will only pay 64, $\frac{43}{100}$ shillings, making a loss to him of about seven per cent. on all that part of his income which may be demanded of him in sums over forty shillings: such would inevitably be the consequence of a redundant coinage of silver. How far this evil may be practically averted by restricting the coinage, and keeping the supply of shillings short of the demand, whereby the price may be kept above the intrinsic value, can

only be known by practical observation. But it can scarcely be possible, under any state of things, to convert a sum of money in silver coins into gold, without paying, at least, the difference between the mint price of silver, and the nominal value of the silver coins (viz 66s.—62s.) near six and one half per cent.; and Mr. Gallatin, in his Essay on Banks and Currency, has remarked, that "Great Britain, in adopting gold as the sole standard of value, has found it, however, absolutely necessary to admit silver coins for payments not exceeding forty shillings." This limitation would, it seems, have been sufficient for the object intended; but whether, in order to prevent the exportation, or only the better to assist the adherence to an abstract principle, the new silver coinage has been overrated about nine per cent., by coining the troy pound weight of standard silver into sixty-six, instead of sixty-two shillings. This debased coin is attended with the same inconvenience as a paper currency issued by Government. There is, on account of the profit, a temptation to issue too much, and no sure means can be found of ascertaining the amount wanted for effecting the payments to which that portion of the currency is applicable. It is worthy of remark, that England, from a scrupulous adherence to a single standard, should have actually established two distinct standards of value; one for wholesale, and the other for retail transactions. It is obvious that, since a debased coin can neither be profitably exported, nor applied to other purposes, any considerable excess beyond what is actually wanted for effecting small payments, must cause a depreciation. Should Government be ever so moderate in its issues, the facility with which that coin may be, not counterfeited, but illegally imitated and put into circulation, must ultimately defeat the object intended. In the mean while, should the excess be such, that the retailers, of every description, who are obliged to take in payment silver inapplicable to wholesale purchases, could not dispose of the surplus, they must, to indemnify themselves, add something to the prices. We believe this to be already the fact; and that this, like every other depreciated currency, operates as a tax, which affects, principally, those who are compelled to purchase any thing by retail."

The committee cannot assent to the opinions here advanced. Whatever may be the composition or the relative value of the circulating medium used in large commercial transactions and in the liquidation of balances with foreign nations, that measure will be the practical standard, and prices of all commodities will be thereby determined. Wholesale prices necessarily regulate prices by retail; the former price is, on an average, the lowest rate at which production will be continued. Retailers purchase at this minimum price, and the recompense for effecting sales will be in proportion to the time, labor, and capital expended; if this compensation falls short of what is usual in other pursuits, the retailer will abandon the business; if his profits are higher, competition will speedily bring them to the ordinary rate. Should the English retailer find it necessary to "add something to their prices" when payments are made in silver, will not the tenant who has rent to pay in gold, the mechanic, laborer, and all others, who exchange their services or their wares for silver coin, be equally attentive to their respective interests? If it be practicable to issue this subsidiary currency to such excess as would produce the effect alleged, this general rise in price to the extent of the seignorage exacted would merely frustrate the covetous intention of the issuers, without affecting the wages of labor, the rate of profits, or amount of individual income.

The suggestion that the British Government have issued silver coins to such excess as to depreciate their nominal value, involves the supposition that they have taken active measures to defeat the sole object of their own laws; for the consequent rise in prices would inevitably dissipate the contemplated profit at the mint, and would hazard the exportation of these coins.

Although it has too frequently been the practice of necessitous or unjust governments to issue currency to excess, whether the medium used was debased coin or paper, yet the more general prevalence of intelligence, and of integrity of purpose, do not seem to warrant the assumption, so universally proclaimed, that pecuniary regulations cannot safely be entrusted to the discretion or superintendence of governments.

It is believed that the Commissioners of the Sinking Fund in England, and in the United States, execute the highly important trust confided to them with singular propriety and correctness; and the fact that the unfunded debt, called exchequer bills, circulating at the lowest rate of interest, is issued by the British Government (notwithstanding its pressing wants) with such moderation that it bears a considerable premium, evinces conclusively that fidelity and integrity are to be found in all stations.

The committee do not entertain the slightest apprehension of impropriety or mismanagement in the issue of any description of coins that Congress may think proper to direct; but a superabundant revenue precludes the possibility of hazard from the imposition of a seignorage for the sole and exclusive object of public advantage.

It may reasonably be presumed that sound views are now so widely diffused that no doubts are entertained of the evil effects of an excessive increase of currency: the consequent depreciation in the value of the circulating medium, and general rise of prices, operate with peculiar severity on all fixed money incomes; and as that of government is comparatively immense in amount, they are especially interested in the maintenance of a sound currency, and they are the natural protectors of private rights in that respect. Government will find no inducement to issue small coins, howsoever degraded, to excess; and as the community will not demand a greater supply than is indispensable to their convenience, it is confidently predicted that prices will not be unfavorably influenced.

The public are not so much interested in the quality or composition of the currency as in the uniformity of its value, so that the buyer and seller, the producer or consumer, may feel assured of procuring the just measure of his bargain, and that quantity of money which will bear the like proportion to the mass of exchangeable commodities, as when the contract was made.

Treasury notes, bank bills, or other promissory notes, sustained by public confidence, will effect exchange and payments as conveniently and satisfactorily as gold or silver money, if it were practicable to regulate the quantity in like manner. If, for example, fifty millions of dollars, in gold or silver coin, is the quantity of circulation necessary for the United States, if paper was not used, is it not evident that the like amount in bank notes would maintain foreign exchanges and prices at the same rate.

It cannot be doubted but a certain reduction in the amount of bank issues in 1815 and 1816, would have lowered exchanges to par, and elevated the currency to the value of silver, whether the banks had resumed specie payments or not; a steady curtailment of the present circulation will have a similar effect, and soon cause specie to be abundant.

It is the quantity, the nominal amount of coin, or its representative in bank notes, which regulates the value of the currency and prices, and not the

intrinsic value of the medium of exchange. Does not paper circulate altogether, on this principle, on the strength of public confidence, and not from intrinsic worth? and may not the banks raise or lower its value at pleasure?

Hence it clearly and conclusively follows, in the opinion of your committee, that where the regulation as to the quantity of currency is under the exclusive control of government as coiners, as is the case in France, and with equal effect in England over the subsidiary currency, any amount of seignorage may be exacted, if the numerical amount of coins be limited to the quantity of perfect coins previously circulating.

Lord Liverpool, when master of the English mint, has stated in his celebrated letter upon coins, "in a period of eighty-three years, no more than £584,764 17s. 3½*d.* sterling, of silver, has been coined; and from the year 1760, a period of forty years, no more than £63,983 15s. 5*d.* sterling has been coined, and the silver currency has gradually fallen into its present state of imperfection;" "that the deficiency of shillings, in 1760, amounted to one-sixth of their original weight, and that of the six pences to at least one-fourth;" in 1798, it was found that the deficiency will amount in the half crowns to more than nine per cent., shillings twenty four per cent., and six pences thirty-eight per cent.;" and, in reference to the effects of currency on prices and foreign exchange, he justly remarks, "when the exchange with foreign nations is at any time against this kingdom, any defect in those coins which are the principal measure of property, will first shew itself by a rise in foreign exchanges to our disadvantage: and the merchant, to compensate the loss he sustains thereby, will naturally raise in due proportion the price of all his merchandize; this increase of price gradually extends itself to every commodity, and at last reaches even the most common necessities of life: such is the progress by which the price of all commodities is raised in consequence of a defect in our coins. But this rise is influenced by a defect in that sort of coin only which is the principal measure of property, and in which our balances to foreign countries are regulated and paid. The truth of these principles is fully illustrated by comparing what happened in the reign of King William the Third, with what has happened of late years. In the reign of King William the Third, when the silver coins were the principal measure of property, and were greatly defective, the price of all commodities rose in proportion; but, since the gold coins are become the principal measure of property, though our silver coins are upon an average as defective as they were before the general recoinage in the reign of King William the Third, the price of commodities, even when purchased with silver coins, has not risen on account of the defect of these silver coins; the present defective silver coins continue to be paid and received at their nominal value, and according to the rate at which they can be exchanged for our gold coins; sometimes, when they are wanted for particular purposes, they are exchanged even *at a premium above their nominal value.*"

This brief notice of the experience of England, during a century of unexampled prosperity, amidst the most extraordinary vicissitudes, commercial and political, practically demonstrate, to the conviction of the most sceptical, that a subsidiary currency materially degraded by wear or seignorage, will circulate without prejudice to retail prices, whether limited to small payments or not, provided it be restricted to the quantity which public convenience may require.

Our own experience is corroborative. The small change in use, was long exclusively, and is yet partially, Spanish coins, greatly debased by wear,

until recently that the banks have made some objection to receive *large amounts of quarter dollars* by tale; these small coins have circulated without the slightest inconvenience or disadvantage, though the coins of twenty five cents are believed to be defective about four per cent., twelve and a half cent pieces from ten to twelve per cent., and those of six and a quarter cents from fifteen to twenty per cent.; and it may be noticed, as a striking illustration of the effect of a limited supply, that these small defective coins are as readily received and disbursed by retailers as our own recent issues of perfect coin, of twenty-five, ten, and five cents each.

Do not copper cents circulate freely, and with utility, although degraded by a seignorage at the Mint of more than twenty-five per cent.?

Although theory and experience authorize the belief that a subsidiary currency will bear a heavy seignorage, yet the committee have no disposition to recommend a higher rate than will accomplish two objects.

1st. Its permanence in circulation, by being disqualified for exportation or for melting; and,

2d. To derive a revenue from its coinage equivalent to the expenses.

The amount of seignorage contemplated, will, it is conceived, be insufficient to invite counterfeiting. The expense of fabricating small coins is very considerable, imitating and uttering is expensive and dangerous; and deception to any great extent, from the general and constant intercourse with banks, may be deemed impracticable.

On this point, Lord Liverpool observes, "that our silver coins have been, for almost a century, in a very defective state; that the present silver coins are, on an average, at least *one third* less in weight and value than those that will be made upon the plan I have proposed. Our present silver coins are mere counters without any impression on the face or reverse, or any graining on the edges, or indeed any exterior mark by which they can be distinguished as coins; so that the counterfeiter could easily have fabricated or imitated coins of this description, with very little risk, and in any quantity; and his profit must have been very great, if he could have practised the fraud before mentioned; and yet it is certain that he has never thought it for his interest to engage in this sort of traffic."

The committee are of opinion, that, under existing circumstances, it would be vain and inexpedient to attempt any farther improvement in the currency than the introduction of coin for the payment of labor, and for retail business.

Under this impression, they believe that the ingress and egress of all such foreign gold or silver coins as are current in general commerce, ought to be facilitated by reverting to former usage for all sums over one hundred dollars, that of regulating them as a legal tender at their intrinsic value.

They think that the practice of coining gold or silver at a heavy expense at the Mint, is an inexcusable waste of the public revenue, totally useless while bank notes are the principal measure of value; and, therefore, free coinage ought to be entirely discontinued.

They recommend that the relative value of gold be fixed at 1 for 15.625 of silver; and that hereafter bullion tendered at the Mint should be paid for in coin within five days from the period of deposite, deducting one half of one per cent. from the quantity of gold, and one per cent. from that of silver bullion, excepting domestic gold, which, at the pleasure of the depositor, may be melted and assayed, and stamped, as to weight and fineness, at a graduated charge not to exceed one dollar per hundred ounces.

The committee believe that minute fractions of weight ought to be rejected, and that such simplicity of regulation should be adopted as would enable the least informed to judge accurately of the intrinsic value of the current coins.

They think that a subsidiary currency may be established on the following basis, with great public advantage: by estimating the relative value of gold at the occasionally high rate in commerce of 1 to 16 of silver; and imposing a seignorage on both metals; and directing the coinage of the integral parts of an eagle and dollar in such even or arbitrary proportions as would cause gold of this standard, in coin, to be worth four cents per grain, and silver four grains for one cent.

The committee anticipate, from the establishment of this system, the following benefits:

1st. The maintenance of an incomparably greater degree of uniformity in the value of the currency.

2d. Securing the industrious classes of the community from all risk of loss, upon receiving payment for their labor.

3d. Enabling the public to procure, at their pleasure, gold or silver coins for all minor objects of expenditure, and preserving, permanently in circulation, an abundant supply of the customary coins.

4th. Excluding finally, from domestic circulation all foreign coins.

5th. Securing to the importing merchant the full value of foreign coins, and preserving them while here in transit in that state most suitable and profitable for exportation.

6th. Protecting the revenue for the future, from being taxed with a useless and heavy expenditure yearly at the Mint, it being totally unimportant, the composition of the specie fund held by the banks, as the effective demand for American coin, cannot, for twenty years past, have exceeded two, three, or four hundred thousand dollars annually.

In conformity with these views, your committee beg leave to present to the consideration of the House the annexed bill for establishing the value of coins, and for regulating the operations of the Mint.

They also append two valuable communications from the highly respectable Director of that establishment, and some other interesting documents.

A BILL

Concerning the Gold and Silver Coins of the United States, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That from and after the day of next, the officers of the Mint shall melt, assay, and stamp, the weight and fineness of all domestic gold deposited for said purpose, at a charge not exceeding one dollar for every one hundred ounces, and in the like proportion for a smaller quantity: *Provided,* That no assay shall be made in any case, or of any quantity, without charging seventy-five cents for the same.

Sec. 2. *And be it further enacted,* That all gold or silver bullion deposited for coinage after the day of next, shall be paid for in coin, under the direction of the Secretary of the Treasury, within five days from the making of such deposite, deducting from the amount of said deposite one-half of one per centum on gold, and one per centum on silver bullion.

Sec. 3. *And be it further enacted,* That it shall be the duty of the Director of the Mint, from and after the day of next, to cause to be fabricated and coined, small gold and silver coins, according to the following standard: gold coins of the value of five dollars, to contain one hundred and twelve and a half grains of pure gold, and one hundred and twenty-five grains of standard gold; gold coins of the value of three dollars, to contain sixty-seven and a half grains of pure gold, and seventy-five grains of standard gold; gold coins of the value of two dollars, to contain forty-five grains of pure gold, and fifty grains of standard gold; silver coins of the value of fifty cents, to contain one hundred and eighty grains of pure silver, and two hundred grains of standard silver; silver coins of the value of twenty-five cents, to contain ninety grains of pure silver, and one hundred grains of standard silver; silver coins of the value of ten cents, to contain thirty-six grains of pure silver, and forty grains of standard silver; and silver coins of the value of five cents, to contain eighteen grains of pure silver, and twenty grains of standard silver.

Sec. 4. *And be it further enacted,* That it shall be the duty of the Secretary of the Treasury to furnish such moneys as he may deem expedient to enable the Director of the Mint to supply the current demand, and to keep on hand in the Bank of the United States, or to have in the course of manufacture, one hundred thousand dollars of the aforesaid small gold coins, and the like amount of the small silver coins.

Sec. 5. *And be it further enacted,* That the die used in fabricating the subsidiary currency, shall exhibit on the face, as heretofore, the value; and, on the reverse, the weight, in grains, of each coin.

Sec. 6. *And be it further enacted,* That all gold coins of the integral parts of an eagle, coined after the day of next, of nine-tenths pure gold, and one-tenth alloy, shall be a legal tender by tale, or according to their weight, at the rate of four cents per grain, to the amount of ten dollars: *And provided also,* That said gold coins shall be receivable in payment of the public lands by the United States, at the same rate, to the amount of two hundred dollars.

Sec. 7. *And be it further enacted,* That all silver coins of the integral parts of a dollar, coined after the day of next, of nine-tenths pure silver, and one-tenth alloy, shall be a legal tender by tale, or according to their weight, at the rate of four grains for one cent, to the amount of five dollars.

Sec. 8. *And be it further enacted,* That all silver coins of the United States, minted anterior to the day of next, and of the fineness of fourteen hundred and eighty-five sixteen hundred and sixty-fourth parts pure silver, shall be a legal tender in all payments, at the rate of one hundred and fifteen cents and six-tenths of a cent per ounce.

Sec. 9. *And be it further enacted,* That from and after the day of next, no foreign coins shall be a legal tender in payment for any sum less than one hundred dollars.

HOUSE OF REPRESENTATIVES,

April 25, 1832.

MY DEAR SIR: I had the pleasure of forwarding one of the reports on coin, which I trust you have received. May I ask the favor of your reply to the following queries?

Assuming the average expense of coining half dollars to be one per cent., and wastage one-fourth of one per cent., what would you conceive to be the relative expense of coining and of waste on quarters of a dollar, dimes, half dimes, and a similar statement in regard to the relative expense and wastage upon eagles, half eagles, quarter eagles?

What do you estimate the expense incurred by the coinage of cents? And what has been the average cost of the quantity of copper used in making cents, to the amount of 1,000 dollars, within the last few years?

What proportion of alloy do you think might be incorporated in dimes and half dimes, without lessening their durability? In the small coins of many of the European nations, the proportion is very great. What would probably be the relative amount of attrition if the alloy was twenty, twenty-five, or thirty per cent.?

What amount of charge per ounce would be abundantly sufficient to defray the expense of melting and assaying gold, and stamping the weight and fineness upon the ingots? And the same with respect to assaying and stamping the weight and fineness upon silver in ingots?

The laws regulating the Mint require revision and emendation, and, as they are now scattered through several volumes, are troublesome to refer to, and no person can possibly understand the subject so well as you do; and I wish your convenience would permit you to examine into the matter.

Whenever that is done, I am decidedly of opinion that our coins, both of gold and silver, which are to be the principal standard of value, should be made to correspond to the proportions used in the French mints, say $\frac{9}{10}$ fine, and $\frac{1}{10}$ alloy. Upon examining some documents here, I find that Mr. Rittenhouse conformed to this proportion during the entire period of his service as Director of the Mint, as respects silver, making the dollar 416 grains standard, alloy $41.6 = 374\frac{4}{10}$ grains of fine silver, although this was manifestly unauthorized by law.

Mr. De Saussure, for the short period he was in office, did the same, and it was not until Mr. Boudinot succeeded to that situation that it was made to correspond to the law. I am inclined therefore to think that Mr. Rittenhouse had discovered the error into which General Hamilton had fallen respecting the quantity of fine silver in a Spanish milled dollar; because the proportion used by Mr. Rittenhouse is stated to have been sanctioned by the then Secretary of State, Mr. Jefferson, and the Secretary of the Treasury, Mr. Hamilton.

Excuse the trouble I now give you; and believe me to be, with much respect and esteem,

Your obedient servant,
CAMPBELL P. WHITE.

Dr. SAMUEL MOORE,

Director of the Mint, Philadelphia.

MINT OF THE UNITED STATES,

Philadelphia, May 4, 1832.

DEAR SIR: I have now the satisfaction of replying to the inquiries embraced in your letter of the 25th ultimo, in part, reserving the subject of the change of the standard of our coins, as also that of a revision of the laws regulating the Mint, for another occasion.

In regard to the proportional expense of the coinage of the several denominations of silver coins mentioned, viz. half dollars, quarters, dimes and half dimes, and the relative waste thereon, after due consideration, and conference with the proper officers of the Mint, I have to state, that, assuming the expense on half dollars, exclusive of wastage, to be one per cent., which may be considered as nearly correct, under present circumstances, on a coinage of about two and a half millions of dollars, the proportional charge may be stated as follows:

Half dollars,	-	-	-	-	-	-	1	per cent.
Quarter dollars,	-	-	-	-	-	-	1½	"
Dimes,	-	-	-	-	-	-	2¼	"
Half dimes,	-	-	-	-	-	-	3	"

The relative wastage on the above, may be stated as follows, viz.

Half dollars,	-	-	-	-	-	-	$\frac{2.5}{100}$	per cent.
Quarter dollars,	-	-	-	-	-	-	$\frac{2.8}{100}$	"
Dimes,	-	-	-	-	-	-	$\frac{3.3}{100}$	"
Half dimes,	-	-	-	-	-	-	$\frac{3.6}{100}$	"

According to the above estimates, when the amount of coinage is such as to make the charges on half dollars, including wastage, to be 1½ per cent., the same expenditure employed on the several denominations named, would present the following proportional results:

Half dollars,	-	-	-	-	-	-	$1\frac{2.5}{100}$	per cent.
Quarter dollars,	-	-	-	-	-	-	$1\frac{2.8}{100}$	"
Dimes,	-	-	-	-	-	-	$2\frac{3.3}{100}$	"
Half dimes,	-	-	-	-	-	-	$3\frac{3.6}{100}$	"

The per centage of expense, as I have on former occasions remarked, diminishes, in some degree, in proportion to the amount coined, as a part of the charges of the establishment are invariable, whatever may be the coinage. The estimates above given, are based on such an amount as have been found, with our present facilities, under existing regulations, to cost about \$30,000; and the result exhibits the per centage of cost on the amount of the several denominations which could have been coined with the same expenditure, supposing a suitable adaptation of the different parts of the machinery.

I would remark, however, that the application of the power of the Mint for a whole year, or even for the fourth of that time, in one continuous period, to the coinage of denominations below the half dollar, has never occurred. Hitherto, the smaller coins have been an object of attention simultaneously with the larger; a measure rendered almost indispensable, in order to expedite the payment of deposits, and also further recommended by the difficulty of disposing of the small coins, except in limited proportions.

In regard to the coinage of gold, I have to observe, that, for any amount which can be estimated on as the probable coinage of a year, the difference of expense per cent., on account of coinage or wastage in the different denominations of our gold coin, would be scarcely appreciable. The esti-

mates given in my communication to the Secretary of the Treasury, of January 28, 1831, published in your report, states the cost of a coinage of gold of three millions of dollars in a year, at the half of one per cent.; and that of any additional amount at 1-10 per cent., exclusive of wastage, on the additional sum. The wastage on gold is there stated at about the fifth of one per cent. Those estimates were founded on a coinage consisting almost entirely of half eagles, the only denomination of which any but trivial amounts have been issued from the Mint within late years. The estimate would require no correction of any moment, if applied to eagles or quarters.

Copper for coinage has hitherto generally been imported for the Mint in disks of the weight of the coin intended. In this form, the average cost of the copper may be stated at 28 cents, when delivered at the Mint, for a pound avoirdupois. Within the last few years, a pound avoirdupois of our copper coins is equivalent to $41\frac{2}{3}$ cents. The expense of the coinage of cents, when copper is received in the state above referred to, may be estimated at about 5 per cent. on the value issued; so that the cost of a pound of cents may be estimated at about 30 cents. On the amount of \$1,000, the cost of the material, viz. 2,400 pounds of copper, would be \$672, and the coinage \$50, making \$722 per \$1,000.

The subject of the loss on coins by attrition, has been investigated chiefly in relation to those of a fineness near our legal standard. The effect as to this particular, from combining with silver the proportion of copper which you suggest, has not been well determined. The celebrated experiments of Hatchett, in 1803, established various useful results in relation to alloys of gold, but alloys of silver were not an object of special attention.

I forward, herewith, a few specimens of a coin in imitation of our dime, composed of three parts of silver, and one of copper; so that, if the compound 25 per cent., consists of copper, instead of about $10\frac{1}{4}$ per cent., as in our standard silver, the difference of complexion will distinguish them when perfect, and much more so when a little worn. Some of the specimens, and also of the genuine coins, were simultaneously subjected to attrition in a manner which was designed to be equal in all particulars, and must have been very nearly so. The effect of this imperfect trial would indicate that the spurious coin bears attrition with as little loss as the genuine.

This compound is sensibly more refractory, under all the manipulations belonging to coinage, than our standard silver. It would require more care, and the operations would be less expeditious, but its coinage could be effected, if deemed expedient, a question which I am sure will be well considered.

The expense per ounce for melting, assaying, and stamping ingots of gold and silver, must depend very much on their weight, and also on the consideration whether the ingots are to be of uniform weight and fineness.

The assay of an ingot of gold might be estimated at 50 cents, including the affixing the requisite stamp of its fineness. The price per ounce will thus result from the weight; that of a silver ingot might be estimated at 25 to 50 cents, according to the weight.

The expense of melting may be estimated sufficiently near, it is presumed, for the purpose of any calculation it may be your wish to found thereon, as follows:

20 ounces and under, 2 cents per ounce.—No melt to be less than 25 cents.

50 ounces and under, $1\frac{1}{2}$ cents per ounce.—No melt to be less than 40 cents.

100 ounces and under, 1 cent per ounce.—No melt to be less than 75 cents.

250 ounces and under, $\frac{1}{2}$ cent per ounce.—No melt to be less than 100 cents.

500 ounces and under, $\frac{1}{4}$ cent per ounce.—No melt to be less than \$1 87 $\frac{1}{2}$ cents.

In the above classes, the weights not exceeding 100 ounces would generally consist of gold, and the higher weights of silver. The highest weight should not exceed 1000 ounces, which, with all weights between this and 500 ounces, might be \$2 75. On the above proportions, subject to some correction from experience, a table could be constructed for every particular weight.

The above estimates, in regard to melting and assaying, proceed on the supposition that individuals bring, at pleasure, various irregular amounts of gold and silver, of which the quality is to be determined, and the proper stamp impressed on the bar. If, in the inquiries to which this relates, you have in view the expense of issuing from the Mint, ingots of uniform weight and fineness, to be adjusted with the precision due to coinage, the above calculations would be in various ways irrelevant. I have not supposed this to be your object. If this be a misapprehension on my part, the calculations will be corrected accordingly, if desired.

I was aware, from the early correspondence on record in the Mint, that the first coinage of silver had conformed to the proportion of 10 oz. 16 dwts. fine in the pound, which corresponds with the present French coinage. The assay weights employed by the first assayer remain in the Mint, having that proportion marked on standard.

With great respect,

Your obedient servant,

SAM'L MOORE.

Hon. C. P. WHITE,

House of Representatives.

MINT OF THE UNITED STATES,

Philadelphia, May 25, 1832.

SIR: Agreeably to your request, I now offer a few remarks in regard to the subjects referred to the Committee on Coins.

On the subject of the relative value of gold and silver, I have to observe that the proportion recommended by the committee, of 15.625 for 1, does not appear capable of producing any disturbance in our currency. I concur in opinion with those who think that there can be practically but one standard of value, and that, for this purpose, silver is the most fit, especially for the United States. In this view of the subject, it is highly important that gold should not be so estimated as to displace silver from our currency, when the state of foreign exchange may be such as to induce the export of specie. No danger of this result, it is conceived, however, can be apprehended from the change proposed, which is equivalent to an advance of $4\frac{1}{2}$ per cent. on the mint value of gold.

Gold at present constitutes no part of our currency; and, not having, within any recent period, performed in the United States the offices of coin, it has not been the standard of value assumed in existing contracts. The proposed measure, therefore, within the limits mentioned, seems liable to no exception under any aspect of the case. No anxiety is felt, as to consequences, while silver remains the undisturbed standard of value.

It may perhaps be found that a higher advance than that now contemplated, may be also perfectly safe. There is one principle affecting the result of this experiment, the influence of which cannot be precisely estimated, viz. the effect to be produced on the money market for gold, when the United States, with a view to render it a sensible auxiliary in their currency, shall thus enter into competition with those nations in whose currency it is an essential or important element. It is by no means my purpose, however, to recommend a higher ratio than that contemplated by the committee.

If the bill should be passed during the present session of Congress, its effects might be so far ascertained, probably, by the commencement of the next, that a corrected adjustment could be then made on surer data, and form a part of a revised system of mint regulations, which it would be well to defer, until this and some other questions embraced in the resolutions, shall have been determined on.

Allow me, while on this topic, to submit for your consideration a ratio, whereby the eagle would be made to consist of 260 grains standard, which would give all our gold coins without the fraction of a grain, and presents, also, this striking coincidence, that the weight of our gold and silver coins would be to each other in the proportion of 1 to 16; provided the weight of the silver coin remain unchanged. It may be effected by adhering to our present standard $\frac{1}{12}$ of alloy, and raising the value to $15\frac{1}{8}\%$; say 15.577 for 1, which would be equivalent to an advance of $3\frac{1}{4}\%$ per cent. on the present mint value of gold. This is near the proportion of advance contemplated by the committee. It is still nearer that recommended by Mr. Gallatin. Another consideration in favor of it, is, that thereby the first experiment of a higher ratio would be made without changing our gold coins, except in weight. The eagle constituted according to the above principles, would contain $238\frac{1}{2}$ grains fine gold, $21\frac{1}{2}$ grains alloy, and 260 grains standard.

If the proportion now to be assumed, should be found too low for the desired effect, there is another mode of constituting the eagle of 260 grains, which might then perhaps be resorted to with safety, and a reasonable hope of its remaining undisturbed for a long period, viz. by a ratio of 15.865 for 1, and an alloy of $\frac{1}{10}$. This would be equivalent to an advance of $5\frac{7}{10}\%$ per cent. on the present mint value of gold. The eagle formed by these proportions, would consist of 234 grains fine, 26 grains alloy, and 260 standard; no fraction being required to express either of the constituent parts.

I annex a comparative view of the effect of the several proportions which have been thus far suggested, from different sources, for the reformation of the eagle.

	Fine.	Alloy.	Standard.	Proportion of alloy	Gold to silver.	Advance per ct.
Mint, -	238 $\frac{1}{3}$	23 $\frac{2}{3}$	260	$\frac{1}{12}$	1 to 15.777	3 $\frac{84}{1000}$
Mr. Gallatin, -	237 $\frac{7}{8}$	21 $\frac{5}{8}$	259 $\frac{1}{2}$	$\frac{1}{12}$	1 to 15.607	4 $\frac{8}{173}$
Mr. Ingham's rep't	237 $\frac{6}{10}$	21 $\frac{6}{10}$	259 $\frac{2}{10}$	$\frac{1}{12}$	1 to 15.625	4 $\frac{1}{8}$
Committee, -	237 $\frac{6}{10}$	26 $\frac{4}{10}$	264	$\frac{1}{10}$	1 to 15.625	4 $\frac{1}{8}$
Mint, -	234	26	260	$\frac{1}{10}$	1 to 15.865	5 $\frac{77}{1000}$
Mr. Sanford -	233 $\frac{2}{3}$	21 $\frac{12}{3}$	254 $\frac{2}{3}$	$\frac{1}{12}$	1 to 15.900	6

In regard to the regulation of the value of certain foreign silver coins, there are some considerations which recommend a modification of the rate proposed.

The bill contemplates a valuation of the dollars enumerated, at the rate of 116 $\frac{1}{10}$ cents per ounce. This is founded on a calculation of the weight of fine silver contained in those coins, estimated at the same rate as fine silver in the coins of the United States, according to the regulations of the Mint. It will thence happen that, when the limited period has elapsed, the holders of those foreign coins will be unable to dispose of them at the rate at which they were received, without first incurring the charge of sending them to the Mint for coinage; the expense of which may be estimated at least as high as the full difference by which the average of the foreign dollars mentioned exceeds in weight of fine silver the dollar of the United States.

If the foreign silver coins, now in question, be made a legal tender, at the rate proposed, their tendency to come to the Mint would be very much restrained. There would, in fact, be some danger that our own silver coins would be exported in preference to the foreign coins, on account of their being perfectly clean, and not liable to the suspicion of containing counterfeits. The result would be, it is apprehended, that, at the end of the period assumed, the amount of the issues from the Mint would be much less than has been anticipated.

I would, under these views, respectfully suggest, in regard to the various dollars enumerated, if it be deemed expedient to embrace them all in the provision, that they be made a legal tender on the same principles on which the Spanish dollar has, for many years, been a legal tender, and which the bill does not change in regard to that coin, viz. at the rate of 100 cents for a dollar, provided they are of the standard fineness of the Spanish dollar, and the weight thereof not less than 415 grains. The importer of those coins will sell them at a premium above this nominal value, when the market demand for them will bear it, or will send them to the Mint when that will avail him better, and will tender them at the proposed value only when they are worth no more to the receiver.

In regard to the five franc pieces, I retain the views expressed in my letter of January 22, 1831, published in your report of last session. If it be considered expedient to resume their legal tender, I would, on considerations analagous to those suggested above in regard to the foreign dollars, recommend that the rate be no higher than 116 cents per ounce, at which rate they were, for a series of years, formerly a legal tender.

A proposition is now respectfully submitted for consideration, having in view the final termination of the currency of foreign coins in the United States, viz.

That it be declared, in an amendment to the bill on the subject of the legal tender of foreign silver coins, or otherwise, that the sixteenths and eighths of the Spanish dollar shall cease to be a legal tender on the 4th July, 1834; that the fourths of the Spanish dollar shall cease to be a legal tender on the 4th July, 1835; and all other foreign coins on the 4th July, 1836. It is, indeed, true that most of the fractions of the Spanish dollar are below the proportional weight assumed as the condition of their legal tender; but this is not universally the fact in regard to any of them.

The above provisions could be carried into effect without inconvenience to the community, and would, therefore, not be liable to be defeated by applications for their suspension or repeal. They would have the effect of an authoritative notice, on which the Mint would call the attention of the various banks and public institutions throughout the United States, to the most facile means for procuring the designated coins required to supply the circulation. Time would be afforded within the above limits to effect their distribution, a measure not to be accomplished suddenly, nor without the most assiduous care. In the mean time, the coinage of the higher denominations would also proceed, and the circulation become filled with a metallic currency, as rapidly as it could be prepared for its reception, by a well devised abstraction of the redundant paper. The foreign silver coins would contribute their aid during the early years of the period, and, towards its close, it may be presumed, would come very freely to the Mint.

In regard to seignorage.—The design of this would, it is presumed, be twofold; to lessen the expense of the Mint to the public treasury, and to retain the national coins in the country, by diminishing their liability to be exported.

Under existing regulations, the whole of a deposite of bullion at the Mint is returned to the depositer in coins, and without charge if the bullion be of standard fineness. The proposition now is, to set apart for the Government, in future, a certain proportion of the bullion thus deposited, and, out of the remainder, to make for the depositer as many coins as are now made from the whole deposite, and to declare them a legal tender at the same value as our present coins of full weight. This is understood to be intended by the term seignorage, the expediency of which has been referred for consideration.

By the proposed operation, the Government would appear to be relieved, to the extent of the seignorage, from the expenses of the Mint. It is obvious that the coins thus minted would not be exported until those of full weight would command a premium for exportation, proportioned to the diminution of their weight by the seignorage; since the national coins are exported only for the bullion they contain: they are considered as bullion in a foreign country.

It thus appears that a seignorage, equal in amount to the expense of coinage, accomplishes the twofold object in view. It would seem that, to the depositer, also, this procedure is sufficiently favorable: he receives the full tale of coins, and they are a legal tender at the same value as coins of full weight. If they are really thus available for him, he has, in effect, paid nothing for coinage.

Some fallacy is to be suspected under these appearances. On reflection, it occurs that the new principle of coinage has produced a new measure of value, whereby every form of production which becomes the subject of its action, will be advanced in price, beginning with the coins of full weight

which immediately bear a premium for the purposes of the arts, or for exportation.

The principle of a seignorage of the character in question is specifically different from a charge for coinage, equal in amount to the given seignorage, but exacted by setting apart for the Government an equal proportion of the coins when finished of full weight, and delivering the remainder to the depositor. The seignorage is, in these remarks, considered as taken from the weight of the deposit only, which is the least objectionable, as being most obvious; the results would all be the same in effect, if it were taken from the fineness only, or partly from both.

Under present regulations, if 1,300 ounces of silver, of standard fineness, are brought to the Mint, \$1,500, containing 1,300 ounces of standard silver, will be delivered to the depositor, after some delay, but without charge. If a seignorage of one per cent. were now directed to be set apart for the Government out of the above deposit, it would render to the depositor \$1,500, containing 1,287 ounces of standard silver. The 13 ounces retained for the Government, which would, by our present coinage, make \$15, but by the new about \$15 15, would be thus coined for its use; so that the deposit by this mode yields to the currency \$1,515 15.

If a charge for coinage were directed to be made, by retaining one per cent. of the number of coins, the remainder being delivered to the depositor, he would receive \$1,485, weighing, as before, 1,287 ounces of standard silver; the Government would receive \$15 for its use; making a currency of \$1,500 out of 1,300 ounces of standard silver, in like manner as if the coinage continued free. It is manifest that no change in the measure of value is produced in this case.

Under the first supposed modification of our coinage, viz. by a seignorage the depositor receives 1,500 dollars, with which he can discharge a previous contract of that amount. Under the latter, he receives from the same deposit 1,485 dollars, with which he can discharge only that amount of a previous contract. It is manifest, in this latter instance, that the depositor pays the charge of coinage; but who pays it in the former? The depositor, in the case supposed, escapes. The first creditor who receives the new coins in payment of a previous contract, and has no debt to discharge with them, it would appear, must pay it. All who receive more of these coins than they can apply on account of previous contracts, sustain a proportional share.

All creditors under previous engagements, therefore, are liable to be affected injuriously by the change. The Government is a creditor to the amount of the public revenue, which is generally receivable in coins by tale. Its expenditures are also disbursed, to a certain extent, by a tale of coins previously settled, and so far the effect on the public treasury is neutralized, by transferring it to other receiving parties; but so far as its expenditures embrace objects liable to the vibrations of price, the public treasury pays, in the consequential advance on all supplies, a share of the seignorage on coinage.

The Government can do its creditors justice by a change of the tale they are to receive, and can reinstate the public treasury in the available amount of its receipts, by a proportional advance on the contributions to the revenue. When all these adjustments have been made, and prices have become conformed to the new measure of value, the condition of things will be the same, as if, instead of the dollar of 416 grains of standard silver, it had been declared, in the original institution of the Mint, that $411\frac{84}{100}$ grains should constitute the dollar, so that 1,300 ounces should be coined into \$1,515 15,

and that one per cent. of the number of coins, viz. \$15 15, should be retained by the Government.

A small seignorage would involve, indeed, a derangement of existing relations nearly inappreciable in its effects. It does not, however, appear to be recommended by any advantage, as a device for supporting the Mint, which should entitle it to a preference over the more direct mode of retaining an equal proportion of the coins of full weight. It is liable to specific objections, and its aspects, moreover, are wholly inauspicious.

A high seignorage must produce a corresponding disturbance of existing relations, with obvious inequity in its first effects, and an eventual equivalent advance in all prices. The results of this policy, when it has been tried by an embarrassed government as a source of revenue, or a relief from instant debts, are in confirmation of the above views. I am aware, however, that the inquiry does not extend thus far.

But may not a seignorage produce a decided tendency in the national coins thus minted, to remain in the circulation of the country?

If the above principles be true, the coins thus minted will remain in the circulation until all coins containing more bullion, under a given legal value, have been expelled; or until such coins, and all other forms of bullion, together with bills of exchange, and all production estimated by the new measure of value, shall have so advanced in price, that the bullion contained in the national coin will be considered as not less available in the foreign market than the coin is at home. When this state of our commercial relations has arrived, the national coins, constituting the measure of value, will be shipped, as convenience shall suggest, to the party interested.

But would not this evil of an exportation of the national coin be deferred and restrained, if not wholly obviated, under a seignorage which should make the legal value of our coins more conspicuously higher than their value as bullion? and, under such a seignorage, would not the United States have possessed, at this time, a more copious metallic currency? The solution of this question, especially the latter branch of it, is vital to the whole inquiry.

It may, in the first place, be incidentally observed, that the shipment of the national coins is not the real evil under which the country, in the case supposed, actually suffers. It is the one complained of, generally, because it is a visible fact associated with that commercial distress which results from importing too freely, in proportion to the amount of exports. It may, however, be more correctly regarded as a remedy for the real evil, and a restraint on its progress. It is, perhaps, the only remedy that can be steadily relied on; it grows spontaneously out of the exigence, and is proportioned thereto.

The effect of diminishing the amount of bullion in that coin which constitutes the measure of value, it appears manifestly, is to advance the price of foreign coins; the premium on which, in the market, exposes, the most immediately, the deterioration of a measure of value. Bills of exchange will be, in like manner, advanced in price, estimated on the previous par. It must be equally plain, that its effects will extend to every article between the shipment of which, and the exportation of the national coin, a merchant may be balancing to make his choice, when a remittance abroad is to be effected under a disadvantageous state of foreign commerce.

If the national coin, constituting the measure of value, had been made in any assignable proportion, say ten per cent. inferior in its weight of fine silver to our present coinage, the advance on foreign coins, bills, and produce,

would have been in proportion, and all the relations of the question as to preference in making a remittance, would have been the same; the national coins would only have been, as they now are, among the last means resorted to in foreign remittances. They tend however to be employed, as they can be most efficient, and will be exported to some extent, when it is perceived that the bullion they contain, however small in proportion to that of other coins of which they are measure, will pay more debt abroad than can be effected with those coins, with bills of exchange or produce purchased, at existing rates, by the national coin at home.

The national coins, therefore, it appears, will expel the foreign under a seignorage, and more promptly, perhaps to some extent, if the seignorage be high; but when these have been expelled, our own coins must, in some proportion, follow them, if the exigence continue, and no seignorage can protect them farther.

The question still, however, occurs: would not the amount of silver in our currency, at this time, have been greater under a seignorage than according to our present system, and greater under a high seignorage than a low one?

It is all but certain that the amount would have been no greater under a seignorage of one per cent., operating from the commencement of the Mint, and it can be rendered not a little probable that it would have been less by a higher seignorage.

To possess a full metallic currency, consisting of a coin which constitutes the measure of value, and is of course a universal tender for all payments, requires not merely that the national coins should not be exported on slight emergencies, but that the bullion from which they are to be supplied shall come freely to the Mint.

The Mint was established in the year 1792. During the first twenty years of the intervening period, ending with 1811, foreign exchange was below the real par, so that no inducement existed to export specie in preference to buying bills. During nearly all that period, Spanish dollars commanded a premium of 1 to 5 per cent. for the purpose of the China trade; so that, in reference to Spanish dollars which formed the efficient excess of the metallic currency, the national coins were under the influence of a relation, equivalent, in its effects, to a seignorage of that range. Silver, moreover, was generally very abundant in the country, yet the national coins did not largely accumulate in the circulation. Silver was slowly offered for coinage. Few persons found adequate motives to induce them to incur the loss of bringing Spanish dollars to the Mint. They were to the holder more available as foreign dollars than they would have become in coins of the United States. When the premium on Spanish dollars reached about 4 per cent., the dollar of the United States came into competition with them. This being about the extent to which they were underrated in China, their value as bullion for that market thus became equal to their use as coin in the purchase of Spanish dollars.

During the first ten years from the institution of the Mint, ending with the year 1801, the amount of silver coined was, in round numbers, \$1,574,000. Within the second period of ten years, ending with 1811, the amount was \$4,858,000. In the third period, ending with 1821, the amount was \$6,180,000. And within the last period of ten years, ending December 31, 1831, the amount was \$18,325,000. During the last year alone it exceeded three millions of dollars.

Within the first two periods, the exportation of our national coins must have been very inconsiderable, for reasons before suggested. But the ten

years ending with 1821, including the war, and the subsequent years of extreme disturbance in the currency, present a different aspect. An exhausting exportation of specie marked this period; the result of causes surmounting all imaginable control of any seignorage, or other system of legislative restraint.

The exportation of our silver coins within the last period was not very important in amount. They have, during the greater part of that interval, been protected by foreign coins, which were preferred for exportation even at a small premium. Besides supplying this demand for remittance abroad, a large surplus of foreign coins has annually been sent to the Mint for coinage. It is, on the whole, rendered exceedingly probable, on adequate data, that the residue of previous issues, which remained at the commencement of 1822, was greater than the amount which has been exported within the subsequent years, and that the silver coins of the United States, now remaining in our currency, exceed twenty-one millions of dollars.

One fact meriting notice, which is presented by this comparative view, is, that, previous to 1812, when there was no inducement to export our coins, bills being almost constantly below the true par, the issues from the Mint were very trivial in amount: less than half a million of dollars annually, it appears, was added to our metallic currency, in our own coins, even within the last half of this period, although the Mint had been in action, and inviting deposits, during a previous period of ten years.

Another fact presented is also instructive, and more encouraging. During the last period of ten years, beginning with 1822, and ending with 1831, foreign exchange has been almost invariably above the true par, and frequently to such an extent as to make a remittance in silver preferable to that by bills. Spanish dollars, including Spanish American, have very frequently borne a small premium, for this purpose, of $\frac{1}{4}$ to $\frac{3}{4}$ per cent. Within this period, however, the exportation has fallen lightly on our silver coins, and the supply of silver for coinage has been nearly all the time copious. The twofold object, therefore, desired to be secured by a seignorage, seems to have been attained by our present system under existing circumstances.

But it has just been seen, that when Spanish dollars were at a premium of $\frac{1}{2}$ to 5 per cent. for a particular purpose, in regard to which our coins were deemed inferior, a consideration having precisely the effect of a seignorage in its influence to restrain Spanish dollars from coming to the Mint, few of those dollars were offered for coinage. It is also observable that when Spanish dollars rose for this particular application of them to 4 per cent., it became equal to the shipper whether he should ship our own dollars, or buy Spanish dollars with them at that disproportion. If, at that moment, a seignorage of one per cent. had been directed to be taken from our silver coins, the premium on Spanish dollars would immediately have advanced to 5; the new emissions would have been just as liable to be shipped along with Spanish dollars, under this premium, as the previous issues were at 4 per cent., and the dollars previously coined would have accompanied them at a premium of one per cent. The President, in 1805, interposed more efficiently, by directing that the coinage of *dollars* should be suspended at the Mint—this remedy met the particular exigence. The Chinese, through prejudice, undervalued the dollar, the lower denominations they refused.

Adverting to the facts of the last ten years, it appears that, when Spanish dollars are at a premium of about $\frac{1}{4}$ per cent. for exportation to Europe, the general bullion market, it is about equal to the exporter whether these

shall be shipped at this rate, or our silver coins substituted for them; the preference would probably depend on the circumstance of finding either class in convenient quantities, without trouble, or of a late emission, and therefore to be relied on as free from impurities. If at such a moment a seignorage of one per cent. were ordered to be exacted, the premium estimated by the new emission, which will be the measure of value, instantly rises to $1\frac{1}{4}$ per cent., and the question of preference remains the same, the inefficiency of the procedure becomes apparent as to a protection of our own coins.

The conclusion from these views, which seems consonant to reason and sustained by abundant analogies, is, that even a small premium on foreign coin, or seignorage on that national coin which is the measure of value, restrains deposits in a proportional degree from coming to the Mint, and that a higher seignorage exerts no adequate influence to retain them in circulation.

It may therefore be reasonably inferred, that the aggregate of the silver coins of the United States, now in our currency, is probably greater than it would have been if a seignorage equal only to the expense of coinage, had been, from the first establishment of the institution, exacted at the Mint. The premium on foreign silver within the periods examined, it appears has very sensibly restricted the amount of coinage; a seignorage would have made the premium higher.

In the preceding illustrations, the Spanish dollar, under its various forms, has borne a prominent share. They constitute a large proportion of our deposits. The reasoning is in no way less applicable to bars of silver or bullion in any other form. If foreign coins become the material for the Mint to operate on, they become so as bullion. When a merchant is hesitating whether he shall send to the Mint his importation of silver, consisting partly of Spanish dollars, and partly of silver in bars, or export them to Europe, and draw bills for the value; he knows that, in exporting them, they are alike available by weight as bullion. And, universally, it may be stated, that when, under any given regulation of our Mint, foreign silver coins are repelled to a market where they are disposed of by weight, bars of silver of the same standard, being equally available in the same market, at the same estimate per ounce, will be equally disposed to leave us.

It will also occur that the remarks apply specifically to silver. This is for directness of illustration in part, but chiefly in order to retain the idea steadily in view that the coin proposed to be acted on is the measure of value, according to which premium and price are regulated. Whenever this conception is neglected, all deductions from other premises are to be viewed with some distrust.

It seems, therefore, that no advantage is to be derived from a seignorage on our silver coins which constitute the measure of value. A coin which is intended to perform a subordinate office in the currency, as the silver coinage of England, from which a seignorage is exacted of 6 per cent., and which has no pretensions to be a measure of value, can be thus retained in the country. It is not liable to be exported, but imitations of it of the same intrinsic value, are liable to be manufactured abroad, and added to the circulation. The accruing emolument is a consideration rendering the occurrence probable, and it is understood, that it has, to a large extent, taken place. If the seignorage, therefore, be intended to sustain the expense of the Mint, it appears liable to defeat from this quarter, and in a manner subject to much irregularity. To make spurious imitations of the legal coin,

exposes to the danger of detection; but when the character of any coinage is such that it offers an adequate profit on manufacturing the genuine coin, the control of the nation over its currency is thus liable to be interfered with, and, at all events, the intended profit to the public treasury defeated.

On reviewing the preceding remarks, it seems manifest, that, whatever charge is made on coinage, should be made by a direct deduction of the proper per centage from the coins themselves, and that, in relation to our silver coins which are the measure of value, whatever may be the charge to be deducted, and whatever proportion of alloy shall be preferred, the quantity of fine silver should remain rigorously the same.

If this principle be assumed, and maintained, that the quantity of fine silver in our silver coin shall remain unchanged, a charge for coinage will have no influence on the measure of value.

We may experiment on our gold coins without fear, and with some resulting convenience. Though a legal tender, they have never been a measure of value, and while kept from interfering with the measure in silver, there is no danger; but it is a grave question to disturb the quantity of fine metal in the silver coin.

The propriety of some charge, when the Mint shall be in operation with a force competent to effect the payment of deposits, with a delay merely nominal, seems recommended by considerations of adequate weight, independently of the question as respects the public treasury.

If coinage were free from charge, and payment of the amount made without delay, artists would send their bullion to the Mint for coinage, merely to procure its division into convenient portions of known fineness and weight. The merchant, also, while hesitating in regard to the exportation of his bullion, would find a convenience in sending it to the Mint for the purpose of receiving it divested of all extraneous matter, and its weight and fineness verified, after which he would export it as before intended. It consists, therefore, with a judicious regulation of the Mint, that coinage should not be wholly free. A charge tends to protect the Mint from deposits not designed to enter into the currency. The charge should, however, be reasonable, or deposits will be repelled from the Mint.

It is important, also, that bullion, in our national coins, should be valued a little higher than in foreign coins, which constitute our principal deposit at the Mint: if not, the national coins will be exported as freely as the foreign for the bullion they contain. The difference, however, should not be inequitable, or bullion of that character will not be offered freely for coinage.

In relation to the latter principle, our existing Mint regulations have effected all that seems necessary in that regard, by the proportion which the fine metal in our coins bears to that of the Spanish dollar.

The dollar of our coinage contains $371\frac{1}{4}$ grains of fine silver, which is about $\frac{1}{2}$ per cent. below the average product of the Spanish and Spanish American dollars when deposited at the Mint for coinage. So that the depositor of 100 dollars of those coins, will receive in return about $100\frac{50}{100}$ dollars in coins of the United States.

This gain is not fully equivalent to the delay of coinage, which has generally, within recent years, been from 40 to 50 days; and, therefore, individuals rarely bring those dollars to the Mint. The principal depositors of silver in this form are the banks, and chiefly the Bank of the United States.

The effect of this small difference between our dollar, and those foreign coins familiar to us by that name, which are the principal forms under which

deposits of silver can be relied on, has been the chief cause, as it is confidently believed, of that auspicious promise which the result of the last few years, and the aspects of the present time, afford, of filling our circulation with an abundant metallic currency from deposits spontaneously offered. This proportion was the result perhaps of inadvertence, through the want of skilful assayers. It is, however, singularly well fitted, under existing circumstances, to invite supplies of silver for coinage, without the direct action of the Government.

During the period when our commerce with China exerted its peculiar influence in the case, the difference between our dollar and that of Spain, had little effect to induce deposits of the latter at the Mint. But that disturbing force appears to have been subjected, effectually, to the control of other influences and new equivalents; so that the various forms of the Spanish dollar, which, in the preceding remarks, are regarded as of one family, have rarely, within recent years, commanded a premium above that which is due to the occasional irregularities of our commerce with Europe. In two instances within the two last years, deposits of Spanish dollars have been received at the Mint direct from Canton, exceeding in amount \$20,000. These, indeed, are special occurrences, but the indication coincides with other known facts and obvious tendencies.

This difference of about $\frac{1}{2}$ per cent. between our dollar and that of Spain, as the honorable Mr. Wilde observed in his remarks on introducing his resolution, has had the effect of a seignorage to that extent, of which the Government does not receive the benefit. Certainly the direct and immediate benefit accrues to the depositor. It was in fact establishing a measure of value not precisely that which Mr. Hamilton had in view; but it could, under the circumstances, have had no effect as a new measure. It was, for some years, neither known nor suspected to be so. It was not, as you have noticed, observed instantly at the Mint.

The peculiar value of this constitution of our dollar, appears to rest on this very fact, that it is almost insensibly inferior to the Spanish dollar, so that those coins, for ordinary purposes, may be employed indiscriminately. It is only when their relation happens to be tested as forms of bullion, to be exported or applied in the arts, that the difference becomes appreciable. The national coins then assume their rank as the controlling measure of the others—determine their premium, and when this advances to about $\frac{3}{4}$ per cent., accompany them, reluctantly, abroad, diminishing at the same time their own tendency to withdraw from us, by arresting the advance of the premium thereon, and prices of other substitutes, as the currency, in which resides the measure of value, is contracted. At this point, ordinarily, the state of commercial exchange begins to recede; the national coins remain undisturbed; the foreign gradually reappear through other avenues; mingle to some extent in the circles of our currency, in company with our own coins, and thenceforward come freely to the Mint, and assume the national costume.

One important characteristic of this nominal seignorage it appears, therefore, is, that it is too small to be obvious. Our dollar, therefore, may associate with other coins of the same denomination in ordinary pursuits. Another characteristic of it is, the one before alluded to, that it accrues to the depositor, and therefore does not repel him from the Mint. On full reflection, it appears to me manifest that this last condition is essential, and that if any further diminution of the coin should be adopted with a hope of there-

by increasing the permanent mass of metallic currency, that, in like manner, it should accrue to the depositer, if otherwise, bullion will not come spontaneously to the Mint.

On the whole subject, it would seem, that, having our unit of money and standard of value constituted with so much felicity of effect, as to offer, under existing circumstances, a direct, sensible, and, as it appears, efficient inducement to bring to the Mint that form of silver bullion which is most abundant and accessible, and to exert, also, a gentle but constant and controlling restraint on the export of the national coins, it must be wise to leave this feature of our system undisturbed.

Our dollar remaining undisturbed in its weight of fine silver, and a small charge being made at the Mint for prompt payment, will, I apprehend, do all that would be expedient now in regard to our silver coins. The charge is light, and will be felt by individual depositors as being for a consideration altogether favorable. It will not in any sensible degree, it is presumed, cause deposits to be withheld. Though the banks, our chief depositors, would find an interest in bearing the delay rather than paying the discount for coinage.

There is, however, one point meriting consideration in regard to the foreign silver coins, in aid of the design of securing a copious metallic currency in coins of the United States. It is, that the former be not made a legal tender at a rate which would forbid their coming to the Mint without loss. This has been adverted to before.

The act of Congress of April 2, 1792, establishing the Mint, contemplated a charge, for prompt payment, of $\frac{1}{2}$ per cent, leaving it, however, optional with the depositer to decline. The banks having generally been the sources from which bullion was received, this provision has rarely been carried into effect; and, in no instance, within recent years. The provision of the 14th section of the above act, which relates to this subject, would therefore require to be made positive.

The same allowance for prompt payment, it is presumed, would be applied to both gold and silver. It would be advisable that this new regulation should not take effect until 60 days from the passage of the act, as large deposits now occupy our vaults. The sum of \$150,000, to \$200,000, made available in the Bank of the United States for the purposes intended, would be sufficient even at first; and subsequently, perhaps, a less sum. A quantity of gold must, in the first instance, be procured on public account; but this, if the change of ratio takes place, will be accomplished at a trivial premium, or at par.

Prompt payment out of the dormant funds of the Government would be insensible to the public treasury. The deductions would, however, bear a very considerable proportion of the expense of the Mint, and, together with the gain on the copper coinage, would, it is believed, limit the effective annual disbursement for the Mint to a sum not exceeding \$20,000; so that, if the appropriation were \$30,000, the sum of \$10,000, refunded out of the copper coinage on an average, would reduce the effective expense to the sum above mentioned. Any charge for coinage, which could be devised to devolve further the expense of the Mint on the depositer, would have the effect to lessen the supply of bullion, and thus defeat the object, now so much desired, of expanding the metallic circulation. These estimates proceed on the assumption that the supply of bullion may be sufficient for an average coinage of \$6,000,000 annually for the next ten years. The sup-

ply will not probably average this sum. Estimating the above amount, including wastage, at one per cent., viz. \$60,000, the $\frac{1}{2}$ per cent. charge at \$30,000, and the supposed gain on copper at \$10,000, would reduce the effective disbursement to \$20,000. After ten years, when it may be supposed that the currency will be satisfactorily supplied with coin, other regulations adequate to sustain it might be devised in regard to the charge for coinage, if deemed judicious.

One remark on another topic—the expediency of making gold a tender in large payments, and silver a legal tender in small payments only, or the reverse. The first branch of this proposition, it is presumed, is merely a transient thought—an inquiry, not a recommendation. The conception would be fearful, if it were entertained. Our metallic currency is silver, exceeding, it is believed, \$20,000,000 in our own coins, and, in all, probably \$30,000,000. We have not now half a million in gold to form the basis of a currency in which countless millions in property and engagements are involved. The immediate export of our silver, in exchange for gold at a high premium, would be inevitable. The reverse proposed would derange nothing, but it does not appear that it could be in any way preferable to the present system of our currency. Gold is not well fitted for small payments. Even under the provision suggested, silver would probably be employed in preference.

The occasion seems opportune to express, very respectfully, again, my perfect conviction that it is of the most grave public concern that we abide by our silver coinage of its present intrinsic value as a tender in all payments, and ruling measure of value. Steadfast to this principle, gold may continue a general legal tender also, with perfect safety, and with probable convenience, its ratio to silver being so regulated as not to displace the latter. When its market demand is above the ratio, it will bear a premium, and all parties interested will be secure of its equitable value. The letter of Mr. Gallatin, given in Mr. Ingham's report, is highly instructive in regard to the effects of such an adjustment in France.

That the divisions of our silver coin, less than the half dollar, should be a tender to a limited amount only, would be liable, it is conceived, to no exception, but might be regarded as improving our monetary system. This question, however, with some others, belongs to the revision of the general regulations of the Mint which have been alluded to before.

In regard to the expediency of a coinage of gold which shall be a legal tender only to the Government, and at rates fixed from time to time, it is not apparent that any special efficacy can be derived to this system by making the proposed coins different in weight or fineness from our present ordinary issues. The peculiarity relied on, is, that the value at which these are received by the Government, shall be publicly announced for the assurance of the otherwise uninformed, in regard to the rate at which they may safely receive the gold pieces. The object is to promote the diffusion of gold through the circulation; and it is probable that no gold pieces could be devised, more acceptable by their convenience, than the several denominations now familiar to us.

Information is given, weekly, through the public prints, of the rates paid for gold in our commercial cities, without the effect contemplated by this proposition; and it is derived from the same authority on which the Government would determine its periodical rates, viz. the dealers in coins, bullion, and exchange. The official confirmation of these rates, at given periods,

is all of superior efficacy, which the new regulation appears to contain. It is not, however, my object to inquire into the extent of its probable success, but to recommend a mode of effecting the experiment, without disturbing the ordinary arrangements of the Mint.

It is suggested, therefore, that the gold coinage remain as at present, or be modified by the change contemplated by the committee. By a distinct regulation, to be adopted when the occasion shall arise, the proper officer may be authorized to declare, periodically, the rate at which the coins designated are received in payments due to the Government. The experiment can thus be made without defeating any other object, and may be suspended, if it prove ineffectual. It may be, that the re-adjustment of the relative value will render a resort to this expedient unnecessary, or other considerations may occur to induce a distrust of its success.

A few enactments, embraced within the scope of the original resolution on which the committee was raised, to be followed by a systematic code of regulations, which might be submitted early next session, would, it is believed, be the most beneficial procedure now. The enactments in view relate to the following subjects: The relative ratio of gold and silver; prompt payment of deposits at a charge of $\frac{1}{2}$ per cent.; and the legal tender of certain foreign coins regulated, and the limitation thereof, in regard to all foreign coins, defined.

The above provisions would be somewhat experimental, and might bear very instructively on the legislation contemplated hereafter, when the effects may have been so far developed as to afford a safe guide in establishing a permanent system for the Mint.

I have thus, conformably to your request, communicated freely the suggestions which occur to me on the subjects referred to the committee, having specially in view their relation to the Mint. You will please accept them as intended to promote the interests confided to this institution.

With great respect, your obedient servant,

SAM. MOORE.

Hon. C. P. WHITE, *House of Representatives.*

ESTIMATE of the quantity of fine Gold or of Silver, and of the Alloy which ought to be contained in the Coins of the following Nations, according to their respective Mint regulations; also, the result of assays of those Coins.

Denomination.	Fineness.	Seignorage and remedy.	Fine metal.	Alloy.	Standard weight.
ENGLAND—			<i>Grains</i>	<i>Grains.</i>	
Gold guinea	22 carats	1-6 carat	118 $\frac{58}{100}$	107 $\frac{0}{100}$	5 dwt. 9 $\frac{39}{100}$ grs.
Silver crown	11 oz. 2 dwt.	3 $\frac{18}{31}$ grs. fine	429 $\frac{21}{31}$	34 $\frac{26}{31}$	19 dwt. 8 $\frac{1}{10}$ grs.
New coins:					
Gold sovereign	22 carats	1 6 of a carat	113	10 $\frac{1}{4}$	5 dwt. 3 $\frac{1}{4}$ grs.
Silver shilling	11 oz. 2 dwt.	{ 2 dwts. per lb. 4s. per lb. seignorage }	80 $\frac{8}{11}$	6 $\frac{6}{11}$	3 dwt. 15 $\frac{8}{11}$ grs.
FRANCE—					
Gold Louis	900 milliemmes	$\frac{1}{400}$ in wt. $\frac{1}{333}$ alloy	89 $\frac{6}{100}$	9 $\frac{96}{100}$	4 dwt. 3 $\frac{56}{100}$ grs.
Silver five franc piece	900 milliemmes	$\frac{1}{200}$ in wt. $\frac{1}{333}$ alloy	347 $\frac{5}{100}$	38 $\frac{6}{100}$	16 dwt. 2 $\frac{2}{100}$ grs.
ANTWERP—					
Gold souverain	22.0 $\frac{3}{4}$ carats	$\frac{1}{213}$ in wt. & $\frac{3}{4}$ gr. fine	78 $\frac{1}{2}$	7 $\frac{1}{100}$	3 dwt. 13 $\frac{3}{4}$ grs.
Old Coins:					
Silver ducatoon	10 dwt. 11 $\frac{1}{2}$ grs.	$\frac{1}{160}$ in wt. & 1 gr. fine	446 $\frac{3}{4}$	66 $\frac{3}{4}$	1 oz. 1 dwt. 9 $\frac{1}{2}$ grs.
HOLLAND—					
Gold ducat	23 7-12 carats	{ Seignorage $\frac{1}{160}$ wt. & 1 gr. fine }	53	$\frac{9}{100}$	2 dwt. 5 $\frac{9}{100}$ grs.
Old coins:					
Silver guilder	10 dwt. 22 $\frac{1}{2}$ grs.	Seignorage 1 $\frac{48}{100}$ p. ct.	146 $\frac{3}{4}$	14 $\frac{1}{4}$	6 dwt. 17 grs.
NETHERLANDS—					
Gold Williams	900 milliemmes	-	93 $\frac{1}{2}$	10 $\frac{4}{100}$	5 dwt. 3 $\frac{9}{100}$ grs.
New coins:					
Silver guilder	893 milliemmes	-	148 $\frac{1}{2}$	17 $\frac{2}{100}$	6 dwt. 22 $\frac{6}{100}$ grs.
BREMEN—					
Gold Fredericks	21 $\frac{3}{4}$ carats	-	93 $\frac{4}{100}$	9 $\frac{6}{100}$	4 dwt. 7 grs.

ESTIMATE—Continued.

Denomination.	Value where issued.	Value in Dol- lars and Cents.	Standard Gold to Silver.	Fine Gold to Silver.	ASSAYS.		
					London Mint.		Philadelphia Mint.
					Better or worse than Standard.	Fine metal.	Fine Metal.
ENGLAND—							
Gold guinea	21 shillings	} 4 79 ⁴ / ₁₀ 1 15 ⁴ / ₄	-	-	-	118.02 to 118.65	
Silver crown	5 shillings		1 to 15 ⁷ / ₁₀₀	1 to 15 ¹ / ₂	-	-	429.7
<i>New coins:</i>							
Gold sovereign	20 shillings	} 4 56 ⁵⁶ / ₁₀₀ 21 ⁴ / ₄	-	-	-	112.52 to 113	
Silver shilling	1 shilling		1 to 14 ¹⁵⁹ / ₁₀₀₀	1 to 14,287	-	-	
FRANCE—							
Gold Louis	20 francs	} 3 62 93 ⁶ / ₁₀	-	-	w. 0.1 ³ / ₄ grs.	89.43	
Silver 5-franc piece	5 francs		1 to 15 ¹ / ₂	1 to 15 ¹ / ₂	w. 7 dwts.	344.9	345.06 to 346
ANTWERP—							
Gold souverain	S florins, 2 st. of ex.	} 3 17 ¹ / ₇ 1 20 ³ / ₄	-	-	w. 0.0 ¹ / ₄ gr.	78.6	
<i>Old coins:</i>			1 to 16	1 to 15	w. 14 dwt.	445.5	
HOLLAND—							
Silver ducatoon	3 do 1 do	} 2 14 ¹ / ₈ 39 ¹ / ₂	-	-	b. 1.2 ¹ / ₄ grs.	52.8	
Gold ducat	106 stivers		1 to 15 ⁸ / ₁₀₀	1 to 14 ⁷ / ₁₀	w. 4 ¹ / ₂ dwt.	145.1	52.5
<i>Old coins:</i>							
Silver guilder	20 stivers	} 3 77 ⁷ / ₃ 40					
NETHERLANDS—							
Gold Williams	10 guilders	} 3 77 ⁷ / ₃ 40					
<i>New coins:</i>			1 to 16	1 to 15 ⁷ / ₈			
Silver guilder	1 guilder						

BREMEN—	5 rix dollars	-	3 77	-	-	w. 0.2 grs.	92.2
Gold Fredericks	-	-	-	-	-	-	-
HAMBURGH—	6 marks banco	-	2 14½	-	-	b. 1.2½ grs.	52.9
Gold ducat	-	-	1 08	1 to 16½	1 to 15 1/17	w. 10 dwt.	397.5
Silver rix dollar	-	-	-	-	-	-	-
DENMARK—	14 marks 12 sh.	-	2 14½	-	-	b. 1.2 grs.	52.6
Gold ducat	-	-	1 5½	1 to 16⅔	1 to 14½	w. 13 dwt.	388.4
Silver rix dollar	-	-	-	-	-	-	-
SWEDEN—	94 skillings	-	2 11 5/6	-	-	b. 1.2 grs.	51.9
Gold ducat	-	-	1 6 7/8	1 to 16⅔	1 to 14 5/6	w. 14½ dwt.	388.6
Silver rix dollar	-	-	-	-	-	-	-
RUSSIA—	10 roubles	-	7 48½	-	-	b. 1.2½ grs.	181.9
Gold imperial	-	-	74½	1 to 17	1 to 15	w. 13 dwt.	273.0
Silver rouble	-	-	-	-	-	-	-
VIENNA & TRIESTE—	4½ florins	-	2 14½	-	-	b. 1.2½ grs.	53.2
Gold ducat	-	-	97½	1 to 18	1 to 15 3/10	w. 1 oz. 5 dwt.	355.5
Silver rix dollar	-	-	-	-	-	-	-
LEGHORN—	40 lire	-	6 49	-	-	b. 1.3½ grs.	160.8
Gold rusponi	-	-	1 04 3/8	1 to 15 5/8	1 to 14½	w. 2 dwt.	386.4
Silver Franciscone	-	-	-	-	-	-	-
PORTUGAL & BRAZIL—	6,400 reas	-	8 20	-	-	w. 0.0½ gr.	201.8
Gold ½-Johannes	-	-	64 3/8	1 to 16	1 to 15 7/10	w. 7 dwt.	237.5
Silver new crusado	-	-	-	-	-	-	202.8 to 203.2
SPAIN AND FORMER Co-	-	-	-	-	-	-	-
LONIES—	-	-	-	-	-	-	-
Gold doubloon	-	-	14 79	-	-	w. 1.1 gr.	361.8 to 262.4
Silver dollar	-	-	1 01	1 to 16	1 to 16 3/8	w. 8 dwt.	370.9
UNITED STATES—	-	-	-	-	-	-	-
Gold eagle	-	-	10 00	-	-	w. 0.0½ grs.	246.0
Silver dollar	-	-	1 00	1 to 15 2/3	1 to 15	w. 8½ to 10½ dwt.	368.3
							to 370

The ratios of Gold to Silver, from 1760 to 1829, with the averages for each ten years, and the total mean average for 70 years.

YEARS.	Pure gold to pure silver.	Average for ten years.	YEARS.	Pure gold to pure silver.	Average for ten years.
1760	14.29 to 1	14.51 : 1	1795	14.77 to 1	14.94 : 1
1	13.94 : 1		6	14.77 : 1	
2	14.63 : 1		7	15.45 : 1	
3	14.71 : 1		8	15.45 : 1	
4	14.91 : 1		9	14.29 : 1	
5	14.69 : 1		1800	14.81 : 1	
6	14.41 : 1		1	14.47 : 1	
7	14.45 : 1		2	15.23 : 1	
8	14.58 : 1		3	14.47 : 1	
9	14.45 : 1		4	14.67 : 1	
1770	14.35 : 1	14.49 : 1	5	15.14 : 1	14.85 : 1
1	14.36 : 1		6	14.25 : 1	
2	14.19 : 1		7	14.46 : 1	
3	14.73 : 1		8	14.79 : 1	
4	15.05 : 1		9	16.25 : 1	
5	14.62 : 1		1810	16.15 : 1	
6	14.34 : 1		11	15.72 : 1	
7	14.04 : 1		12	15.04 : 1	
8	14.34 : 1		13	14.53 : 1	
9	14.89 : 1		14	15.85 : 1	
1780	14.43 : 1	14.45 : 1	15	16.30 : 1	15.41 : 1
1	13.33 : 1		16	13.64 : 1	
2	13.54 : 1		17	15.58 : 1	
3	13.78 : 1		18	15.42 : 1	
4	14.90 : 1		19	15.82 : 1	
5	15.21 : 1		1820	15.71 : 1	
6	14.89 : 1		21	15.98 : 1	
7	14.83 : 1		22	15.91 : 1	
8	14.71 : 1		23	15.91 : 1	
9	14.89 : 1		24	15.64 : 1	
1790	15.01 : 1		25	15.69 : 1	15.80 : 1
1	14.95 : 1		26	15.69 : 1	
2	14.43 : 1		27	15.77 : 1	
3	15.01 : 1		28	15.77 : 1	
4	15.32 : 1		29	15.95 : 1	

Total mean for 70 years - - 14.92 : 1

Gregory King estimates the stock of gold and silver, at the discovery of America, at 2,500,000,000 dollars. Gerboux (de la Legislation Monetaire) computes the metallic circulation of Europe, at that time, at only 114,000,000 dollars. We will take the whole stock of the world, of gold and silver, in 1492, at

Produce of the American mines, from 1492 to 1803, according to Humboldt	-	-	-	-	-	2,000,000,000
Add for omissions	-	-	-	-	-	35,000,000
From 1804 to 1810, seven years, at 47,000,000	-	-	-	-	-	329,000,000
From 1811 to 1829, nineteen years	-	-	-	-	-	285,000,000
Produce of the mines of Europe and Northern Asia, from 1492 to 1825 (Malthus)	-	-	-	-	-	600,000,000
From 1826 to 1829, four years, at 7,000,000	-	-	-	-	-	28,000,000
The supply from the coast of Africa since 1492	-	-	-	-	-	150,000,000
						<hr/> 9,158,000,000

From which we will suppose to have disappeared by waste, and every species of consumption, - - - 2,308,000,000

Estimated amount in the world - - - \$6,850,000,000

[London Quarterly Review.]

In the course of this year, (1798,) the officers of the Mint repeated the experiments which they had made in the year 1787, respecting the actual wear of the silver coins; from which it appeared that a considerable loss had been occasioned by the wear of eleven years only: for it was found that

12 $\frac{33}{40}$ crowns	} were requisite to make up a pound troy, instead of	12 $\frac{16}{49}$ crowns	} as issued from the Mint.
27 $\frac{31}{40}$ half crowns		24 $\frac{32}{40}$ half crowns	
82 $\frac{9}{40}$ shillings		62 shillings	
200 $\frac{37}{40}$ sixpences		124 sixpences,	

The deficiency amounted in the

Crowns to 3 $\frac{161}{513}$ per cent.

Half crowns to 9 $\frac{991}{1101}$ “

Shillings to 24 $\frac{1964}{3280}$ “

Sixpences to 38 $\frac{2294}{8037}$ “

And the increased deficiency, in the course of eleven years, in the

Crowns to 100 $\frac{100}{513}$ per cent.

Half crowns to 1 $\frac{333}{367}$ “

Shillings to 5 $\frac{55}{3289}$ “

Sixpences to 3 $\frac{1189}{8037}$ “

Comparative value of English, French, Spanish, and United States' Coins.

The fineness of English and United States' gold being 22 carats, or $\frac{11}{12}$, an ounce of it must contain 440 grains pure and 40 grains alloy; and it is minted into £3 17s. 10½d. or 934½ pence: therefore, as 934.5d. : 240d. :: 440 : 113.0016 grains, the weight of pure gold in one pound sterling or gold sovereign.

The United States' gold eagle contains 247½ grains pure and 22½ grains alloy: therefore, as 113.0016 : 2475 :: 240d. : 525.657d. the sterling value in British gold of one eagle: hence, that of the dollar is 52.5657d. or 4s. 4.5657d.

Again: the standard fineness of British silver is $\frac{37}{40}$: therefore, 1oz. of it must contain 444 grains pure and 36 grains alloy, and is minted into 5s. 6d. or 66 pence.

The United States' and Spanish dollar contain 371¼ grains pure and 44¾ grains alloy, the fineness in each being $\frac{1488}{1600}$: therefore, as 444 : 66, or 74 : 11 :: 371.25 : 55.1858=4s. 7.1858d. the value of the dollar in sterling silver: hence, as 52 5657 : 55.1858 :: 100 : 104.985, or 5 per centum nearly, the difference of its value in sterling gold and silver.

Again: as 11 : 74 :: 240d. : 1614.5454 grains of pure silver in one pound sterling or British sovereign.

Again: since 4s. 6d. is $\frac{9}{40}$ of a pound sterling, it will be as $\frac{9}{40} : 1 :: 1 : 4.44\frac{4}{9}$, differing from the estimated par of one pound \$4 44, by $\frac{4}{9}$ per centum; and as 66d. : 54d. :: 444 : 363 $\frac{1}{3}$ grain pure silver in 4s. 6d. which is $7\frac{4}{4}$, almost 8 grains less than 371¼ grains, the quantity in one dollar.

As 113.0016 : 1614.5454 :: 1 : 14.288, the ratio of the value of silver to gold in the British monetary system; and as 24.75 : 371.25 :: 1 : 15, the ratio of the same in the coins of the United States. Therefore, it will be as 14.288 : 15 :: 100 : 105 $\frac{1}{3}$, or more than 5 per cent. difference in the comparative values of silver.

Again: as 416 : 480 :: \$1 : \$1.1538, the value of 1 ounce United States' standard silver; and as 371.25 : 416 :: \$1.1538 : \$1.2629, the value of 1 ounce of pure silver. Hence, 1 grain of these is value for .002404, and .0026936, of a dollar, respectively. Also, as 247.5 : 440 :: \$10 : \$17 $\frac{1}{9}$, the value of 1 ounce United States' gold; and as 11 : 12 :: 17 $\frac{1}{9}$: \$19 $\frac{1}{3}$, the value of 1 ounce do. pure. Hence, 1 grain is worth .040404.

Again: as 113.0016 : 440 :: £1 : £3 17s. 10½d. the value of one ounce sterling gold; and as 11 : 12 :: £3 17s. 10½d. : £4 4s. 11.45d. the sterling value of 1oz. pure gold. Likewise, as 37 : 40 :: 66d. : 71¼d. = 5s. 11¼d. the value of one ounce pure silver in sterling money.

The kilogramme is equivalent to 15434 grains troy; and a kilogramme of French standard gold, $\frac{9}{10}$ fine, is minted into 77½ forty franc pieces of gold: hence, one gold franc must contain 4.48084 grains of pure gold: therefore, as 113.0016 : 4.48084 :: 240d. : 9.5167d. sterling, the British value of the gold franc in British gold. Again: the kilogramme of French standard silver, $\frac{9}{10}$ fine, is minted into 200 francs: hence, the pure silver in one franc is 69.453 grains: therefore, as 74 : 11 :: 69.453 : 10.324d. the value of the silver franc in British silver.

Lastly: as 247.5 : 4.48084 :: \$10 : 18 $\frac{14}{100}$ cents, the value of the gold franc in United States' gold; and as 371.25 : 69.453 :: \$1 : 18 $\frac{708}{1000}$ cents, the value of the silver franc in United States' silver; and as 4.48084 : 69.453 :: 1 : 15 5, the ratio of the value of silver to gold in the monetary system of France.

The British copper penny is the twenty-fourth part of one pound avoirdupois, or of 7,000 grains troy: hence, one penny must weigh $291\frac{1}{4}$ grains, and it is estimated $\frac{54}{100}$ of our dollar: therefore, as $1d. : 54 :: 291\frac{1}{4}$ grains: $157\frac{1}{4}$ grains, the proportional weight of one cent. But the United States' cent weighs 208 grains, being nearly $50\frac{3}{4}$ grains more than is equivalent in British copper coin: that is, about $32\frac{1}{4}$ per centum; and as $208 : 7000 :: 1 : 33\frac{1}{3}$ cents per pound avoirdupois, the value of the copper; consequently, when the market price of copper exceeds 34 cents per pound, cents will disappear, as eagles and dollars do when their market price exceeds their Mint value.

LONDON ROYAL MINT.—*Minute 16th December, 1826.*

EXPERIMENT made on a given number of pieces, of each denomination, of gold and silver moneys coined since 1816, with a view to ascertain the amount of loss by wear in the said coins.

Denomination and date of coin.		Number of pieces tried.	Loss of weight.	Equal per £100.			Charge of coinage per £100.	
			Grs.	£.	s.	d.	s.	d.
Sovereigns,	1817	350	97.5		4	6.232	}	14 3.749
	1821	500	121		3	11.112		
	1825	500	40.5		1	3.769		
Half sovereigns,	1817	300	52		5	7.476	}	16 10.247
	1820	230	38		5	4.328		
	1825	300	26		2	9.738		
Half crowns,	1816	}	300	650	19	10.332	}	44 9.87
	1817							
	1820	}	300	501	15	3.700		
	1821							
	1824	}	300	46	1	4.865		
	1825							
Shillings,	1816	}	300	602	2	5 11.832	}	56 9.818
	1817							
	1820	}	300	421	1	12 1.915		
	1821							
	1824	}	300	64	4	10.656		
	1825							
Sixpences,	1816	}	300	493	3	15 3.832	}	65 7.876
	1817							
	1820	}	300	312	2	7 8		
	1821							
	1824	}	300	47	7	2.165		
	1825							

JOHN BARTON, *Comptroller.*

